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Teenage Pregnancy and Fertility in the
United States, 1970, 1974, and 1980

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of CDC Surveillance

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Foreword

The purpose of the *CDC Surveillance Summaries* is to make available the most current information on conditions of public health interest for which CDC has major responsibility. The *CDC Surveillance Summaries* provide detailed analysis of the most current available data obtained for CDC surveillance programs. These reports complement other data published by CDC in the *Morbidity and Mortality Weekly Report (MMWR)*, the *MMWR Annual Summary*, and various disease-surveillance reports. This volume contains epidemiologic information derived from surveillance forms, special investigations, and other sources of information collected at the state and national levels.

History of CDC Surveillance Activities

CDC has been actively involved in disease-surveillance activities since the formation of the Communicable Disease Center in 1946. The original scope of the National Surveillance Program included the study of malaria, murine typhus, smallpox, psittacosis, diphtheria, leprosy, and sylvatic plague. In 1954, a surveillance section was established within the Epidemiology Branch of CDC, primarily concerned with planning and conducting continuing surveillance and making periodic reports. National emergencies such as the Asian influenza pandemic and the discovery of Legionnaires' disease have prompted the involvement of CDC in new surveillance activities. Over the years the surveillance activities of CDC have expanded to include not only new areas in infectious disease but also programs in human reproduction, environmental health, chronic disease, risk reduction, and occupational safety and health. Ongoing evaluation of these programs has led to new methods of data collection and analysis and has prompted examination of how data are disseminated to the public health community.

In 1980 and 1981, a survey of CDC staff and state epidemiologists suggested that improved coordination of surveillance reports with the *MMWR* and the *MMWR Annual Summary* would facilitate timely publication; provide greater uniformity in the acquisition, evaluation, and reporting of surveillance data; and encourage use of these data. Several approaches to the development of a systematic process of disseminating disease-specific surveillance reports were considered. On the basis of considerations of timeliness, cost advantages, and editorial uniformity, a report published on a quarterly basis was recommended. Subsequent financial and personnel constraints have made it necessary to publish these reports less frequently.

The *CDC Surveillance Summaries* contain information more reflective of the detailed surveillance reports of the past. CDC hopes that the *Surveillance Summaries* will disseminate surveillance data on a regular schedule, improve the clarity of community public health information, and also produce a cost savings. Although the *CDC Surveillance Summaries* are published more often than once a year, they will typically contain annual data rather than interim data. The *MMWR Annual Summary* will complement rather than serve as the cumulative summary of the *Surveillance Summaries*.

Data Sources

Data on the reported occurrence of notifiable diseases are derived from reports supplied by the state and territorial departments of health and CDC program activities. These data are routinely published in the *MMWR* and compiled in final form in the *MMWR Annual Summary*.

CDC also maintains national surveillance programs for selected diseases — with the cooperation of state and local health departments and other federal agencies — and publishes detailed epidemiologic analyses periodically. Data appearing in the *CDC Surveillance Summaries* or in a surveillance report may not agree exactly with reports published in the *MMWR* because of differences in timing of reports or because of refinements in case definition. It should be noted that data collected for the *MMWR* and the more detailed data published by individual CDC programs are collected independently.

These data should be interpreted with caution. Some diseases that cause severe clinical illness and are associated with serious consequences are probably reported quite accurately. However, diseases that are clinically mild and infrequently associated with serious consequences are less likely to be reported. Additionally, subclinical cases are seldom detected except in the course of epidemic investigations or special studies. The degree of completeness of reporting is also influenced by the diagnostic facilities available, the control measures in effect, and the interests and priorities of state and local officials responsible for disease control and surveillance. Finally, factors such as the introduction of new diagnostic tests and the discovery of new disease entities may cause changes in disease reporting independent of the true incidence of disease. Despite these limitations, the data in these reports have proven to be useful in the analysis of trends.

Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Abortion	Division of Reproductive Health Center for Health Promotion and Education	1987 (SS 36/1) (data from 1982-1983)
Alcohol	Division of Surveillance and Epidemiologic Studies Epidemiology Program Office	1986 (SS 35/2) (data from 1980-1983)
Behavioral risk factors	Division of Nutrition Center for Health Promotion and Education	1984 (SS 33/1) (data from 1981-1983)
Berylliosis cohorts: registry of disease and exposure	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	March 1983 (data from 1951-1980)
Biologics	Data Management Branch Division of Immunization Center for Prevention Services	December 1982 (1982 data)
Botulism	Enteric Diseases Branch Division of Bacterial Diseases Center for Infectious Diseases	May 1979 (data from 1899-1977)
Brucellosis	Bacterial Zoonoses Activity Division of Bacterial Diseases Center for Infectious Diseases	June 1979 (1978 data)
Cancers, endometrial and ovarian	Epidemiologic Studies Branch Division of Reproductive Health Center for Health Promotion and Education	1986 (SS 35/2) (data from 1973-1981)
Congenital malformations	Division of Birth Defects and Developmental Disabilities Center for Environmental Health	September 1985 (data from 1981-1983)
Deaths, 15 leading causes	Health Analysis and Planning for Preventive Services Center for Prevention Services	September 1982 (1978 data)
Dengue	Dengue Branch Division of Vector-Borne Viral Diseases Center for Infectious Diseases	1985 (SS 34/2) (data from 1983-1984)
Diabetes	Division of Diabetes Control Center for Prevention Services	June 1979 (1978 data)

*Publications denoted by "SS" appeared in issues of *CDC Surveillance Summaries*. Other reports listed can be obtained by contacting the responsible administrative unit listed.

Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Diphtheria	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	July 1978 (data from 1971-1975)
Drinking and driving and binge drinking	Division of Nutrition Center for Health Promotion and Education	January 1987 (data for 1982 and 1985)
Drinking, heavier	Division of Nutrition Center for Health Promotion and Education	February 1987 (1985 data)
Encephalitis	Arbovirus Reference Branch Division of Vector-Borne Viral Diseases Center for Infectious Diseases	May 1981 (1978 data)
Enterovirus	Respiratory and Enterovirus Branch Division of Viral Diseases Center for Infectious Diseases	November 1981 (data from 1970-1979)
Foodborne disease	Enteric Diseases Branch Division of Bacterial Diseases Center for Infectious Diseases	1986 (SS 35/1) (1982 data)
Gonorrhea (See also Venereal disease)	Division of Sexually Transmitted Diseases Center for Prevention Services	1984 (SS 33/4) (data from 1983-1984)
Hepatitis	Hepatitis Branch Division of Viral Diseases Center for Infectious Diseases	March 1986 (data from 1984)
Homicide	Division of Epidemiology and Control Center for Environmental Health	May 1983 (SS 32/2) (data from 1970-1978)
Homicide, high-risk racial and ethnic groups	Division of Epidemiology and Control Center for Environmental Health	November 1986 (data from 1970-1983)
Hysterectomy	Epidemiologic Studies Branch Division of Reproductive Health Center for Health Promotion and Education	1986 (SS 35/1) (data from 1981-1982)
Immunization survey	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	April 1983 (data from 1979-1982)
Infections, nosocomial	National Nosocomial Infections Surveillance System Hospital Infections Program Center for Infectious Diseases	1986 (SS 35/1) (1984 data)

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Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Influenza	Influenza Branch Division of Viral Diseases Center for Infectious Diseases	July 1984 (data from 1983-1984)
Injury, National Electronic Injury Surveillance System	Safety Surveillance Branch Division of Safety Research National Institute for Occupational Safety and Health	May 1983 (SS 32/2) (1982 data)
Lead poisoning in workers	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	April 1983 (data from 1976-1980)
Leprosy	Respiratory and Special Pathogens Branch Division of Bacterial Diseases Center for Infectious Diseases	April 1976 (data from 1971-1973)
Leptospirosis	Bacterial Zoonoses Activity Division of Bacterial Diseases Center for Infectious Diseases	August 1979 (1978 data)
Malaria	Malaria Branch Division of Parasitic Diseases Center for Infectious Diseases	September 1986 (1985 data)
Measles	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	September 1982 (data from 1977-1981)
Mortality, infant	Division of Reproductive Health Center for Health Promotion and Education	May 1986
Mortality, maternal	Division of Reproductive Health Center for Health Promotion and Education	1984 (SS 33/1) (data from 1974-1978)
Mumps	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	July 1984 (data from 1977-1982)
National Occupational Hazard Survey (NOHS)	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	October 1983 NIOSH Technical Report DHHS (NIOSH) Pub. No. 83-117
National Occupational Health Survey of Mining	Division of Respiratory Disease Studies National Institute for Occupational Safety and Health	1986 (SS 35/2) (data through 1985)

*Publications denoted by "SS" appeared in issues of *CDC Surveillance Summaries*. Other reports listed can be obtained by contacting the responsible administrative unit listed.

Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Nutrition	Division of Nutrition Center for Health Promotion and Education	August 1985 (1983 data)
Nutrition, pediatric	Division of Nutrition Center for Health Promotion and Education	1983 (SS 32/4) (1982 data)
Occupational characteristics of disabled workers	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	July 1980 (data from 1969-1978)
Occupational hazard surveillance	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	1985 (SS 34/2) (data from 1970-1982)
Occupational injuries among loggers	Safety Surveillance Branch Division of Safety Research National Institute for Occupational Safety and Health	August 1983 (SS 32/3) (data from 1969-1974)
Occupational injuries in the meatpacking industry	Safety Surveillance Branch Division of Safety Research National Institute for Occupational Safety and Health	1985 (SS 34/1) (data from 1976-1981)
Occupational mortality in Washington State	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	DHHS (NIOSH) Pub. No. 83-116 (data from 1950-1979)
Pelvic inflammatory disease	Division of Sexually Transmitted Diseases Center for Prevention Services	1983 (SS 32/4) (data from 1965-1982)
Plague	Plague Branch Division of Vector-Borne Viral Diseases Center for Infectious Diseases	1985 (SS 34/2) (1984 data)
Pneumoconiosis, coal workers	Epidemiological Investigations Branch Division of Respiratory Disease Studies National Institute for Occupational Safety and Health	1985 (SS 34/1) (data from 1970-1981)
Poliomyelitis	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	December 1982 (data from 1980-1981)

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Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Pregnancy and fertility, teenage	Division of Reproductive Health Center for Health Promotion and Education	1987 (SS 36/1) (data for 1970, 1974, and 1980)
Pregnancy, ectopic	Division of Reproductive Health Center for Health Promotion and Education	1986 (SS 35/2) (data from 1970-1983)
Psittacosis	Bacterial Zoonoses Activity Division of Bacterial Diseases Center for Infectious Diseases	February 1983 (SS 32/1) (1979 data)
Rabies	Viral and Rickettsial Zoonoses Branch Division of Viral Diseases Center for Infectious Diseases	December 1986 (1985 data)
Reye syndrome	Epidemiology Office Division of Viral Diseases Center for Infectious Diseases	April 1986 (data through 1985)
Rickettsial disease (RMSF, murine typhus, Q fever, endemic typhus)	Viral and Rickettsial Zoonoses Branch Division of Viral Diseases Center for Infectious Diseases	May 1981 (1979 data)
Rocky mountain spotted fever	Viral and Rickettsial Zoonoses Branch Division of Viral Diseases Center for Infectious Diseases	1984 (SS 33/3) (data from 1961-1983)
Rubella	Surveillance, Investigations, and Research Branch Division of Immunization Center for Prevention Services	1984 (SS 33/4) (1983 data)
Salmonella	Enteric Diseases Branch Division of Bacterial Diseases Center for Infectious Diseases	December 1982 (1980 data)
Sentinel health event (SHE), occupational	Surveillance Branch Division of Surveillance, Hazard Evaluations, and Field Studies National Institute for Occupational Safety and Health	September 1983
Smoking	Office on Smoking and Health Center for Health Promotion and Education	1986 (National Status Report)
Sudden unexplained death syndrome, Southeast Asian refugees	Division of Environmental Hazards and Health Effects Center for Environmental Health	1987 (SS 36/1) (data from 1975-1986)

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Surveillance Programs, CDC

Surveillance program	Responsible unit	Most recent report/summary*
Suicide, all ages	Division of Injury Epidemiology and Control Center for Environmental Health	April 1985 (data from 1970-1980)
Suicide, youth	Division of Injury Epidemiology and Control Center for Environmental Health	November 1986 (data from 1970-1980)
Summer mortality	Division of Environmental Hazards and Health Effects Center for Environmental Health	February 1983 (SS 32/1) (data from 1979-1981)
Surgical sterilization	Epidemiologic Studies Branch Division of Reproductive Health Center for Health Promotion and Education	August 1983 (SS 32/3) (data from 1979-1980)
Toxic-shock syndrome	Respiratory and Special Pathogens Branch Division of Bacterial Diseases Center for Infectious Diseases	1984 (SS 33/3) (data from 1960-1984)
Trichinosis	Helminthic Diseases Branch Division of Parasitic Diseases Center for Infectious Diseases	1986 (SS 35/2) (1984 data)
Tuberculosis	Division of Tuberculosis Control Center for Prevention Services	July 1985 (1984 data) TB Statistics: States & Cities November 1983 (1980 data) TB in the United States
Venereal disease (See also Gonorrhea)	Division of Sexually Transmitted Diseases Center for Prevention Services	(1980 data) Sexually Transmitted Diseases Statistical Letter, No. 130 (data from 1978-1979) STD Fact Sheet, Edition 35
Water-related disease outbreaks	Enteric Diseases Branch Division of Bacterial Diseases Center for Infectious Diseases	September 1984 (1983 data)

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Teenage Pregnancy and Fertility in the United States, 1970, 1974, and 1980

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Introduction

Despite the decline in fertility rates among U.S. females 15-19 years of age during the past decade, these rates remain among the highest in the developed world (1). The adverse medical and social consequences of teenage childbearing make this an issue of public concern. In 1978, CDC published an analysis of data on teenage fertility (live births) in the United States for the years 1960, 1970, and 1974 (2). This current report is a preliminary analysis of data reflecting changes that occurred in teenage fertility between 1970 and 1980, as well as changes that occurred in teenage pregnancy (live births plus induced abortions) between 1974 and 1980. A complete surveillance report on these subjects will be issued soon.

In this report, the epidemiology of teenage fertility, as characterized by race and marital status, is described for all females and for sexually experienced females (those who have ever had sexual intercourse) ages 15-19 within each state and U.S. Department of Health and Human Services (HHS) region. Since not all births to females in this age group are unintended, estimates of intended and unintended fertility rates are included. Pregnancy rates are reported by race for all females and for sexually experienced females ages 15-19 within each state and HHS region. Trends in pregnancy and fertility rates among females 12-14 years of age are reported by race for 1974 and 1980. A comparison is drawn between current trends in teenage fertility and the 1990 Family Planning Objectives for the Nation (3).

Between 1974 and 1980, the pregnancy rate for all females ages 15-19 increased by 8.2%. However, the rate for sexually experienced females declined from 204.5 pregnancies per 1,000 sexually experienced females to 192.8 — a decrease of 5.7%. In the same period, the fertility rate for sexually experienced 15- to 19-year-olds declined by 20.9%, from 146 births per 1,000 to 115.5. The number of pregnancies among females ages 15-19 increased 10.5% from 1974 through 1980, whereas the number of births decreased 7.3%.

Methods

Population estimates for females ages 12-14 and 15-19 used in computing rates for this report were based on Bureau of the Census data collected in 1970 and 1980 (4,5). For 1974, population estimates by state were available only by single year of age 15-19 (6); population estimates by sex and race were obtained by applying the sex and race distribution from the corresponding 1970 cohort to the 1974 total under the assumption that no appreciable change in this distribution had occurred during the intervening 4 years. Because of census-data limitations, racial groups were categorized only as "white" and "black and other" for 1970 (total = "white" plus "black and other") but were available as "white" and "black" for 1974 and 1980 (total = "white" plus "black" plus all other). Since the "black and other" groups for several states included a large proportion of "other," fertility rates for 1970 were compared only for the "total" and "white" categories.

Numbers of unmarried females ages 15-19 in 1970 and 1980 were obtained from Bureau of the Census data on marital status. For 1974, estimates were obtained by multiplying the 1974 estimated total number of females ages 15-19 by the percentage of unmarried females in this age group in 1970 (2). For 1980, the number of unmarried females ages 15-19 obtained from the 1980 census was adjusted at CDC to be consistent with 1970 race classifications. A detailed explanation of this adjustment procedure will be provided in the complete surveillance report.

Fertility rates for females ages 15-19, defined as the number of live births per 1,000 females, were calculated for 1970, 1974, and 1980; pregnancy rates (live births plus induced abortions per 1,000 females) are available only for 1974 and 1980. The term "pregnancy," as used in this report, does not include spontaneous abortions or stillbirths. Natality data were obtained from the National Center for Health Statistics (NCHS) annual vital statistics volumes on natality for 1970 and 1974 (7,8) and from the Public Use Natality Data Tape for 1980 (9) (except for New Mexico, where 1980 births by race were based on the age-race distribution provided by that state). Abortion data were obtained from state reports to CDC (10,11). Births were reported by mother's state of residence, and abortions by state of occurrence except for one state (Utah).

For states not reporting abortions by age or marital status, estimates were derived by assuming that the percentage of total abortions occurring to a particular age group or marital-status category was the same as the average percentage for states in the same HHS region with a known distribution. Numbers of births to unmarried females in 1970, 1974, and 1980 were available from NCHS for states reporting marital status on the birth certificate. For states not reporting this information, mother's marital status was generally inferred by comparing the child's and both parents' surnames.

Fertility rates and pregnancy rates for sexually experienced females ages 15-19 (defined as live births per 1,000 sexually experienced females and live births plus induced abortions per 1,000 sexually experienced females, respectively) were calculated for 1974 and 1980. The term "sexually experienced" was defined as ever having had sexual intercourse; married women were assumed to be sexually experienced. The proportion of never-married females ages 15-19 who were sexually experienced was estimated for blacks and for whites by linear interpolation of data from the 1971 and 1976 Zelnik and Kantner adolescent sexuality surveys (12) for 1974 and from the 1976 Zelnik and Kantner survey and the 1982 National Survey of Family Growth (13) for 1980. For all races, an average of these proportions, weighted by the number of unmarried females ages 15-19 in each racial group, was calculated for the U.S. total and for each region and state. For 1974, the estimated proportions of sexually experienced, never-married females ages 15-19 were 28.1% for white females and 58.3% for black females. For 1980, these estimates were 37.4% and 59.3% for white and black females, respectively. Since information on sexual experience among unmarried females was available only for the white and black races, pregnancy and fertility rates for sexually experienced females were calculated only for those states (and the District of Columbia) where fewer than 3% of total births were to females of other races. For 1974, pregnancy and fertility rates for sexually experienced females were available for 40 states and the District of Columbia; for 1980, these rates were available for 37 states and the District of Columbia. State comparisons of high and low pregnancy and fertility rates were limited to states with more than 1,000 females or more than 20 births in the respective age and racial group. Moreover, comparison of state-specific rates for sexually experienced unmarried females included only states with more than 30 births in the age and racial group.

Since 99.6% of all 1980 births to females under 15 years of age occurred to females ages 12-14, pregnancy and fertility rates for the youngest females are reported for ages 12-14, based on births to females under 15 years of age and on the population of females ages 12-14. Rates were calculated by state for 1970 and 1980 only, since the number of females ages 12-14 was not available for each state in 1974. No estimates of sexual experience have been reported for females ages 12-14.

A formula was developed for estimating the component of fertility in females ages 15-19 that was intended. This procedure adjusts for differences in intended fertility among females in various racial and marital-status categories. The methodology used to calculate 1980 estimates of intended fertility differs slightly from the procedure used in 1974 (2) and will be explained in detail in the complete surveillance report. For this report, 1974 estimates were based on the 1971 Zelnik and Kantner adolescent sexuality survey (12) and the unpublished (at time of use) 1972 NCHS National Natality Survey (14); 1980 estimates were obtained from the 1982 National Survey of Family Growth (13). Estimated intended fertility rates (EIFR) for females ages 15-19 were calculated by race and for all races for each state and region and for the total United States; estimated unintended fertility rates (EUF) were obtained by subtracting the EIFR from the age-specific fertility rate. Numbers of unintended births to females ages 15-19 were also estimated by race for each geographic area.

Results

Pregnancy Trends — Females Ages 15-19: The pregnancy rate for all females ages 15-19 increased from 81.8 pregnancies per 1,000 females in 1974 to 88.5 in 1980, an increase of 8.2% (Table 1). There were 921,696 pregnancies among 15- to 19-year-olds in 1980, an increase of 10.5% from 1974. Among sexually experienced females, the pregnancy rate decreased by 5.7%, from 204.5 to 192.8 (Table 1). Twenty-seven states showed a decline in the pregnancy rate among sexually experienced females, ranging from a 25.7% decrease in New York to a 0.3% decrease in Colorado (Table 2). Although the rates increased in 11 states, from 0.1% in Massachusetts to 13.1% in Florida, the increase was less than 5% in all but three states. In 1980, the pregnancy rate for sexually experienced white females ranged from 107.2 in New Jersey to 252.6 in Nevada (Table 2). Pregnancy rates for sexually experienced black females ranged from 185.9 in South Carolina to 332.8 in California (see Methods section for exclusion criteria used for comparison of high and low state rates).

TABLE 1. Pregnancy rate, fertility rate, estimated intended fertility rate (EIFR), and estimated unintended fertility rate (EUF) for females 15-19 years of age, United States, 1970, 1974, and 1980

Females 15-19 years of age	Pregnancy rate*			Fertility rate*				EIFR* 1980	EUF* 1980
	1974	1980	% Change	1970	1974	1980	% Change 1974-1980		
All races	81.8	88.5	+8.2	68.0	58.4	53.0	-9.2	16.2	36.8
White	—	—	—	57.0	48.6	45.4	-6.6	14.6	30.8
Black	—	—	—	—	118.2	97.9	-17.2	25.7	72.2
Sexually experienced									
All	204.5	192.8	-5.7	—	146.0	115.5	-20.9	—	—
Unmarried	—	—	—	—	71.6	68.0	-5.0	—	—

*Per 1,000 females ages 15-19

TABLE 2. Pregnancy rate,* by race and geographic area, and percentage change in total pregnancy rate for sexually experienced females ages 15-19, United States, 1980

Geographic area	Pregnancy rate			% Change, total 1974-1980
	White [†]	Black [‡]	Total [§]	
United States	—	—	192.8	-5.7
Region I	—	—	—	—
Connecticut	—	—	168.9	-0.6
Maine	—	—	144.2	-1.4
Massachusetts	167.3	122.2	167.5	1.4
New Hampshire [¶]	—	—	183.4	0.1
Rhode Island	—	—	138.0	-4.4
Vermont	188.6	63.8	182.4	4.2
Region II	—	—	187.6	-13.8
New Jersey	—	—	169.2	-22.4
New York	107.2	223.6	136.0	-9.2
Region III	156.7	265.7	182.8	-25.7
Delaware	—	—	190.8	-4.0
D.C.	—	—	192.8	-6.3
Maryland	—	—	473.3	1.5
Pennsylvania	179.3	213.6	189.8	0.2
Virginia	—	—	178.3	-6.2
West Virginia	178.8	204.6	184.9	6.3
Region IV	—	—	165.3	-17.1
Alabama	—	—	196.8	-4.0
Florida	—	—	188.6	1.3
Georgia	—	—	224.0	13.1
Kentucky	197.6	230.3	209.9	-10.5
Mississippi	151.5	—	174.5	-17.2
North Carolina	174.1	210.2	180.3	-9.0
South Carolina	174.1	213.7	188.0	-10.1
Tennessee	168.7	185.9	175.9	-3.9
Region V	167.9	218.5	195.1	-5.8
Illinois	—	—	171.3	-6.2
Indiana	160.1	263.7	184.9	-1.9
Michigan	159.8	237.8	168.7	-10.4
Minnesota	—	—	171.7	-8.2
Ohio	161.4	331.3	—	—
Wisconsin	153.8	229.2	165.8	-11.1
Region VI	—	—	156.0	-4.8
Arkansas	—	—	211.7	-1.4
Louisiana	173.5	220.3	184.7	-11.9
New Mexico	163.5	215.9	184.6	4.5
Oklahoma	208.3	217.3	—	—
Texas	197.0	244.9	—	—
Region VII	—	—	226.9	-0.4
Iowa	—	—	174.2	-7.1
Kansas	—	—	138.7	-14.9
Missouri	203.3	281.4	209.4	-14.8
Nebraska	162.8	261.4	178.8	1.0
Region VIII	—	—	171.2	-2.6
Colorado	—	—	—	—
Montana	201.9	240.0	203.8	-0.3
North Dakota	172.2	181.8	—	—
South Dakota	167.1	157.9	—	—
Utah	135.8	254.9	—	—
Wyoming	173.4	200.6	174.7	3.5

(Continued on next page)

*Pregnancy rate equals live births plus induced abortions per 1,000 sexually experienced females ages 15-19.

[†]Abortion data available by both age and race for selected states only; therefore, pregnancy rates by race are not available for some states, regions, and the total United States.[‡]The total category includes black, white, and other races. Since information on sexual experience rates was available only for the black and white races, total pregnancy rates for those states and regions that had more than 3% of births to females of races other than white or black were not estimated.[§]Did not report abortions by age in 1980. Estimate is derived by assuming percentage of total abortions occurring to 15- to 19-year-olds is the same as the percentage for known states in the region.

(Continued)

TABLE 2. Pregnancy rate,* by race and geographic area, and percentage change in total pregnancy rate for sexually experienced females ages 15-19, United States, 1980

Geographic area	Pregnancy rate			% Change, total 1974-1980
	White [†]	Black [‡]	Total [§]	
Region IX	—	—	—	—
Arizona	192.9	206.2	—	—
California	243.1	332.8	245.7	-3.8
Hawaii	170.9	204.5	—	—
Nevada	252.6	290.3	—	—
Region X	—	—	—	—
Alaska	—	—	—	—
Idaho	170.1	136.4	169.7	-7.0
Oregon	222.1	270.7	—	—
Washington	—	—	—	—

*Pregnancy rate equals live births plus induced abortions per 1,000 sexually experienced females ages 15-19.

[†]Abortion data available by both age and race for selected states only; therefore, pregnancy rates by race are not available for some states, regions, and the total United States.[‡]The total category includes black, white, and other races. Since information on sexual experience rates was available only for the black and white races, total pregnancy rates for those states and regions that had more than 3% of births to females of races other than white or black were not estimated.[§]Did not report abortions by age in 1980. Estimate is derived by assuming percentage of total abortions occurring to 15- to 19-year-olds is the same as the percentage for known states in the region.

Fertility Trends — Females Ages 15-19: The U.S. fertility rate for all females ages 15-19 declined from 68 births per 1,000 females in 1970 to 58.4 in 1974; by 1980, the rate had declined to 53 (Table 1). Fertility rates for white females declined from 57 in 1970 to 48.6 in 1974 and 45.4 in 1980; the rate for black females decreased from 118.2 in 1974 to 97.9 in 1980. For unmarried women ages 15-19, the fertility rate rose from 22.7 to 27.7 between 1970 and 1980, an increase of 22%.

The fertility rate for sexually experienced females ages 15-19 decreased by 20.9% between 1974 and 1980, from 146 to 115.5 per 1,000 (Table 1). The number of births decreased by 7.3%, from 595,449 to 552,161, and the percentage of all births occurring to 15- to 19-year-olds decreased from 18.8% to 15.3%. Fertility rates for sexually experienced females ages 15-19 declined in all 37 states for which data were available and in the District of Columbia, ranging from a decrease of 34.5% in New Hampshire to 4.6% in Utah (Table 3). For sexually experienced white females, the fertility rate decreased by 21.4% between 1974 and 1980, from 133.7 to 105.1. Although fertility rates for sexually experienced black females were higher than for white females in both 1974 and 1980, the rate for blacks decreased by 15.1% during this period. Again excluding states with <1,000 sexually experienced black females, the highest fertility rate for blacks in 1980 occurred in Wisconsin (207.5) and the lowest rate in Delaware (100.7). For whites, the highest rate occurred in Wyoming (164.2) and the lowest rate in the District of Columbia (43).

Between 1974 and 1980, the fertility rate for sexually experienced unmarried females ages 15-19 decreased slightly, from 71.6 to 68 per 1,000 (Table 1). Whereas the highest state rate in 1974 (District of Columbia — 135) decreased to 104.7 in 1980, the lowest state rate (Utah — 24.3) increased to 50.6 (data not shown). In 1980, Mississippi had the highest fertility rate among sexually experienced unmarried females (115.8), and New Hampshire had the lowest rate (41.1). Whereas the fertility rate for sexually experienced unmarried black females decreased by 8.4% between 1974 and 1980, the rate for white females increased by 9.6%. The highest and lowest rates for black females in 1980 (Wisconsin — 201.5 and Massachusetts — 110.2) were higher than the corresponding rates for white females (New Mexico — 77.7 and District of Columbia — 22.6).

TABLE 3. Fertility rate* and percentage change in fertility rate for sexually experienced females ages 15-19, by race and geographic area, United States, 1980

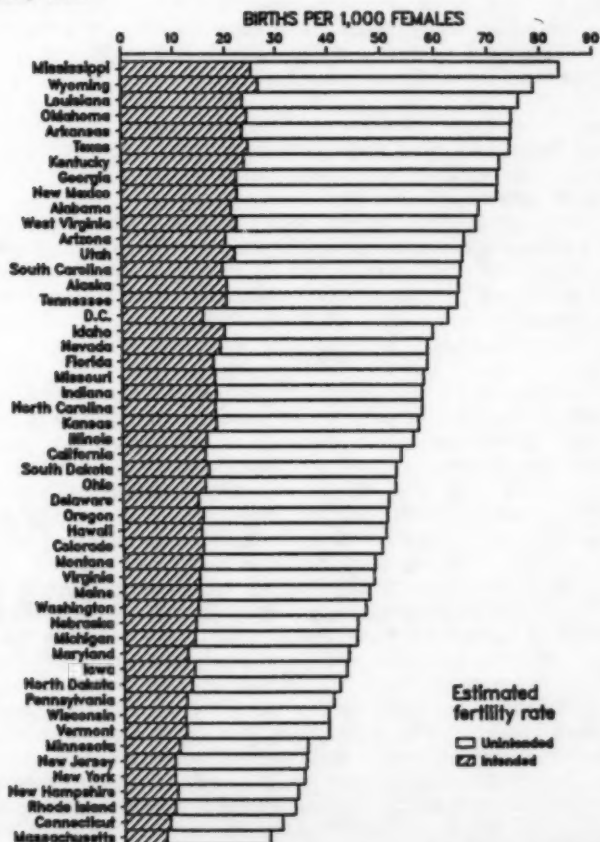
Geographic area	White		Black		Total [†]	
	1980	% Change 1974-1980	1980	% Change 1974-1980	1980	% Change 1974-1980
United States	105.1	-21.4	159.7	-15.1	115.5	-20.9
Region I	73.0	-26.9	128.3	-29.2	77.0	-27.2
Connecticut	62.5	-22.1	141.1	-26.7	73.0	-23.0
Maine	112.1	-23.1	100.0	68.4	112.7	-22.7
Massachusetts	65.5	-27.9	115.2	-31.1	69.0	-28.2
New Hampshire	82.4	-34.5	53.4	-49.3	82.1	-34.5
Rhode Island	74.5	-32.0	153.3	-32.3	80.3	-31.5
Vermont	96.5	-30.2	21.3	-69.1	95.8	-30.5
Region II	64.8	-27.1	129.9	-22.2	80.2	-24.8
New Jersey	60.2	-26.0	156.1	-20.1	81.5	-23.3
New York	66.7	-27.6	119.8	-23.3	79.6	-25.4
Region III	90.3	-25.4	133.2	-15.4	100.1	-23.4
Delaware	89.4	-26.5	100.7	-13.5	113.0	-21.9
D.C.	43.0	-51.5	121.6	-15.4	110.9	-21.0
Maryland	76.9	-19.6	123.8	-20.7	92.8	-19.3
Pennsylvania	85.1	-27.3	143.3	-16.9	93.7	-26.1
Virginia	87.6	-26.0	133.2	-7.9	100.5	-20.8
West Virginia	144.7	-27.4	123.6	-29.9	143.3	-26.1
Region IV	111.6	-29.6	171.2	-12.6	130.5	-24.3
Alabama	111.0	-30.5	168.9	-13.0	131.6	-23.8
Florida	98.2	-31.9	201.8	-3.7	123.7	-24.7
Georgia	115.3	-25.3	178.4	-11.6	138.9	-19.6
Kentucky	144.3	-20.3	172.7	-16.1	147.1	-20.1
Mississippi	118.1	-33.1	193.8	-9.6	155.4	-21.4
North Carolina	97.9	-33.9	141.9	-22.7	113.8	-30.4
South Carolina	106.1	-33.9	149.3	-13.0	124.8	-24.9
Tennessee	116.7	-30.5	163.0	-19.2	127.8	-28.0
Region V	99.1	-24.3	175.8	-14.6	111.3	-23.0
Illinois	99.2	-18.8	197.6	-8.9	122.0	-16.8
Indiana	119.2	-26.9	179.6	-13.2	126.0	-25.4
Michigan	90.5	-29.2	149.2	-26.9	101.5	-29.2
Minnesota	81.7	-20.4	184.7	-19.5	—	—
Ohio	108.5	-23.9	160.6	-13.2	116.5	-22.5
Wisconsin	85.4	-24.4	207.5	-14.5	94.8	-23.2
Region VI	141.7	-18.1	178.4	-8.7	149.7	-16.8
Arkansas	131.6	-30.6	191.3	-9.3	146.3	-25.4
Louisiana	123.5	-19.8	176.1	-5.9	145.1	-14.3
New Mexico	152.3	-13.8	159.1	-10.5	—	—
Oklahoma	141.5	-15.5	197.7	-11.6	—	—
Texas	146.7	-16.7	175.4	-9.8	150.7	-16.0
Region VII	108.0	-19.5	187.2	-6.3	116.3	-18.5
Iowa	98.3	-23.3	192.9	-12.2	100.8	-23.1
Kansas	117.7	-13.8	191.1	-3.2	124.5	-13.1
Missouri	112.6	-19.6	186.0	-6.6	124.4	-18.1
Nebraska	99.1	-20.1	183.6	-6.6	105.2	-19.8
Region VIII	119.0	-16.4	132.8	-26.7	—	—
Colorado	112.4	-19.9	135.1	-23.5	113.7	-20.3
Montana	101.6	-27.2	90.9	-58.5	—	—
North Dakota	88.1	-27.7	105.3	-57.9	—	—
South Dakota	103.5	-26.3	176.5	-55.9	—	—
Utah	143.8	-2.6	119.1	-48.8	142.6	-4.6
Wyoming	164.2	-8.9	117.1	-31.7	—	—
Region IX	124.4	-7.5	136.1	-24.3	—	—
Arizona	138.6	-21.0	164.6	-29.1	—	—
California	123.4	-5.5	133.3	-23.4	119.5	-11.9
Hawaii	94.2	-3.8	143.8	-50.2	—	—
Nevada	116.4	-12.8	196.3	-35.0	—	—
Region X	113.7	-11.9	138.2	-28.8	—	—
Alaska	119.4	16.7	127.5	-23.7	—	—
Idaho	132.1	-18.7	75.8	-35.5	131.7	-19.7
Oregon	116.1	-13.2	165.0	-25.6	—	—
Washington	106.7	-11.1	131.0	-30.8	—	—

*Fertility rate equals live births per 1,000 sexually experienced females ages 15-19.

[†]The total category includes black, white, and other races. Since information on sexual experience rates was available only for the black and white races, total fertility rates for those states and regions that had more than 3% of births to females of races other than white or black were not estimated.

Intended and Unintended Fertility — Females Ages 15-19: The EIFR for females ages 15-19 decreased from 31.6 intended births per 1,000 females in 1974 (2) to 16.2 in 1980 (Table 1). The EUFR in 1980 was 36.8 per 1,000. Between 1974 and 1980, the estimated number of unintended births increased by 40.3%, from 273,063 to 383,188. The EIFR for black females in 1980 (25.7) was 1.8 times higher than the rate for white females (14.6); the EUFR for blacks (72.2) was also higher than the EUFR for whites (30.8) (Table 1). Among individual states, the EIFR ranged from eight in Massachusetts to 26.6 in Wyoming (Figure 1). Among states with at least 1,000 black females ages 15-19, the EIFR for blacks ranged from 17.5 in Massachusetts to 34.1 in Nevada. The EIFR for whites ranged from 4.9 in the District of Columbia to 26.5 in Wyoming (data not shown).

FIGURE 1. Fertility rates* in descending order for females ages 15-19, by state, United States, 1980



*Estimated unintended fertility rate = age-specific fertility rate - estimated intended fertility rate

Pregnancy and Fertility Trends — Females Ages 12-14: The pregnancy rate for females 12-14 years rose from 3.9 to 4.3 per 1,000 between 1974 and 1980. However, the number of pregnancies to females <15 years during this period decreased from 24,128 to 23,010, reflecting the decreasing number of persons in this age group. Although the fertility rate (1.9 births per 1,000 females ages 12-14) did not change between 1970 and 1980, the number of births to females <15 years decreased from 12,529 in 1974 to 10,169 in 1980, and the percentage of all births occurring to females <15 years decreased from 0.4% to 0.3%. Numbers of births decreased in 41 states and in the District of Columbia, increased in eight states, and remained the same in one state. Excluding states with ≤ 20 births to females <15 years, the highest fertility rate in 1970 occurred in the District of Columbia (10.6) and was 26.5 times higher than the lowest state rate (Massachusetts — 0.4). In 1980, the rate in the District of Columbia (at 6.3 still the highest) was 12.6 times higher than the lowest rates, found in Massachusetts and Minnesota (0.5). The fertility rate for white females ages 12-14 increased from 0.8 to 1 per 1,000 between 1970 and 1980. In 1980, the highest rate for white females occurred in Texas (2.1) and the lowest rate in Minnesota (0.3). The fertility rate for black females in 1980 was 7.1, a decrease of 15.5% from 1974 (6.8). The 1980 rates for black females ranged from 11.5 in Mississippi to 3.1 in Massachusetts.

Discussion

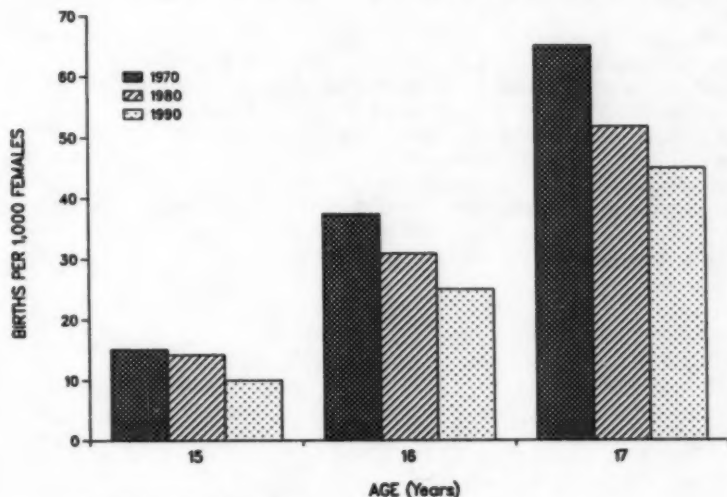
During the past decade, fertility rates declined for all females ages 15-19, as well as for sexually experienced females. Whereas the pregnancy rate for sexually experienced females also decreased between 1974 and 1980, the pregnancy rate for all females ages 15-19 increased. The increase in the pregnancy rate among all females probably reflects the increase in the percentage of never-married 15- to 19-year-olds with premarital sexual experience, from 26.8% in 1971 to 42.8% in 1982 (12,13). Thus, analyses of pregnancy and fertility trends may be misleading if the extent of sexual experience is not considered. Because estimates of sexual experience were not available for females ages 12-14 years, trends in pregnancy rates and fertility rates for this age group were based only on the total population of females ages 12-14 years.

State-specific pregnancy and fertility rates for females ages 15-19 varied considerably. In 1980, for example, the pregnancy rate in Nevada for this age group (118.1) was more than two times the rate in New Hampshire (56.4). Within states, pregnancy and fertility rates for black females were generally higher than for white females; the EUFR for black females in 1980 was also more than twice that for white females. Knowledge of teenage pregnancy and fertility rates, including unintended fertility rates, for females with different demographic characteristics may enable program planners to 1) identify specific target populations, 2) develop appropriate strategies for family planning, and 3) evaluate these strategies.

Since CDC's use of the term "pregnancy" does not include spontaneous abortions or stillbirths, pregnancy rates reported here may be lower than rates released by NCHS (15) or by individual states whose definition of pregnancy may include estimates of spontaneous abortions and stillbirths. Analyses of temporal trends in pregnancy and fertility should not be affected by the use of this definition, since it is unlikely that the national percentage of pregnancies resulting in spontaneous abortions or stillbirths would have changed significantly from 1974 through 1980 or that the percentage of these events varies markedly from state to state. Because births were reported by mother's state of residence and abortions by state of occurrence, state-specific pregnancy rates may also be slightly underestimated or overestimated. Underestimation may occur for states where a large number of abortions are obtained outside the state of residence, and corresponding overestimation may occur for states that report abortions for a large number of nonresidents.

The Family Planning Objectives for the Nation specify that by 1990, there should be no unintended births to females <15 years of age (3). According to the Objectives, age-specific fertility rates for 15-, 16-, and 17-year-olds should decrease to 10, 25, and 45 births per 1,000 females, respectively. Between 1970 and 1980, the fertility rate for 15-year-old females decreased from 15.1 to 14.2; fertility rates for 16- and 17-year-old females decreased from 37.4 to 30.9 and from 65.1 to 51.8, respectively (Figure 2). Although it is not certain that the Objectives for the Nation will be reached by 1990, the decline in age-specific fertility rates since 1970 suggests progress toward that goal. Between 1980 and 1990, the absolute numbers of females ages 12-14 and 15-19 are expected to decline by 11.1% and 20.2%, respectively (16). Even if age-specific fertility rates remain constant, the proportion of all births occurring to females <20 years of age is expected to decline from the 15.6% reported in 1980 to 11.8% of total births in 1990 (16).

FIGURE 2. Fertility rates, by age and year, United States, 1970, 1980, and 1990*



*Per 1990 Objectives for the Nation

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Abortion Surveillance, 1982-1983

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Introduction

In 1969, CDC began abortion surveillance to document the number and characteristics of women obtaining abortions and to assist in the effort to eliminate preventable morbidity and mortality associated with abortion. This report presents abortion data reported to CDC for 1982 and 1983.

Materials and Methods

For 1982 and 1983, CDC received statistics from 52 reporting areas: 49 states, upstate New York, New York City, and the District of Columbia. Data were reported by central health agencies in 46 of the reporting areas and by hospitals and other medical facilities in the other six. The total number of abortions was available from each reporting area; however, information on the characteristics of women obtaining abortions varied: 35 reporting areas provided information on previous live births, whereas 41 provided information on age (Tables 1 and 2). Percentage distributions of women obtaining abortion by various characteristics in Table 1 were calculated after the unknowns were excluded.

All abortion-related deaths that are reported to CDC are investigated by medical epidemiologists to determine the type of abortion, the cause of death, and possible preventable factors. Deaths are first classified as abortion related or not abortion related. Abortion-related deaths are further classified into induced (legally or illegally) abortion-related or spontaneous abortion-related deaths. All classifications are based on available information obtained from death certificates, medical records, and autopsy reports. Since the beginning of abortion mortality surveillance in 1972, most abortion-related deaths have been reported by state health departments. About one-third of the deaths have been identified through other sources, including the National Center for Health Statistics, maternal mortality committees, the Commission on Professional and Hospital Activities, case histories published in professional journals, and private sources.

Results

In 1982, a total of 1,303,980 legal abortions were reported; in 1983, a total of 1,268,987 were reported. This is the first time since 1969 that the number has decreased from the previous year. The national abortion rate decreased from 24 abortions/1,000 women ages 15 to 44 in 1982 to 23/1,000 in 1983. The abortion ratio also decreased — from 354 abortions/1,000 live births in 1982 to 349/1,000 in 1983 (Table 1, Figure 1).

For 1982 and 1983, California had the highest number of abortions, followed by New York City and Texas. Wyoming had 698 abortions in 1982 and 711 in 1983, the lowest numbers reported for those years. The abortion rate ranged from 6 abortions/1,000 women ages 15 to 44 in West Virginia and Wyoming to >100 in the District of Columbia in 1982 and 1983. The abortion ratio was highest in the District of Columbia and New York City (the only cities that are reporting areas) and lowest in Wyoming and Utah for both years.

TABLE 1. Characteristics of women obtaining abortions, United States, 1972-1977

Characteristics	1972	1973	1974	1975	1976	1977
Reported number of legal abortions	586,760	615,831	763,476	854,853	986,267	1,079,430
Ratio*	180.1	196.3	241.6	271.9	312.0	324.5
Rate†	13	14	17	18	21	22
Percentage Distribution						
Residence						
Abortion in-state	56.2	74.8	86.6	89.2	90.0	90.0
Abortion out-of-state	43.8	25.2	13.4	10.8	10.0	10.0
Age (years)						
≤19	32.6	32.7	32.7	33.1	32.1	30.8
20-24	32.5	32.0	31.8	31.9	33.3	34.5
≥25	34.9	35.3	35.6	35.0	34.6	34.7
Race						
White	77.0	72.5	69.7	67.8	66.6	66.4
Black and other	23.0	27.5	30.3	32.2	33.4	33.6
Marital status						
Married	29.7	27.4	27.4	26.1	24.6	24.3
Unmarried	70.3	72.6	72.6	73.9	75.4	75.7
Number of live births‡						
0	49.4	48.6	47.8	47.1	47.7	53.4
1	18.2	18.8	19.6	20.2	20.7	19.1
2	13.3	14.2	14.8	15.5	15.4	14.4
3	8.7	8.7	8.7	8.7	8.3	7.0
≥4	10.4	9.7	9.0	8.6	7.9	6.2
Type of procedure						
Curettage	88.6	88.4	89.7	90.9	92.8	93.8
Suction curettage	65.2	74.9	77.4	82.5	82.6	90.8
Sharp curettage	23.4	13.5	12.3	8.4	10.2	3.0
Intrauterine instillation	10.4	10.4	7.8	6.2	6.0	5.4
Hysterotomy/hysterectomy	0.6	0.7	0.6	0.4	0.2	0.2
Other	0.5	0.6	1.9	2.4	0.9	0.7

es, 1972-1983

1977	1978	1979	1980	1981	1982	1983
30	1,157,776	1,251,921	1,297,606	1,300,760	1,303,980	1,268,987
5	347.3	358.3	359.2	358.4	354.3	348.7
	23	24	25	24	24	23
ution [§]						
0.0	89.3	90.0	92.6	92.5	92.9	93.3
0.0	10.7	10.0	7.4	7.5	7.1	6.7
8	30.0	30.0	29.2	28.0	27.1	27.1
5	35.0	35.4	35.5	35.3	35.1	34.7
7	34.9	34.6	35.3	36.7	37.8	38.2
4	67.0	68.9	69.9	69.9	68.5	67.6
6	33.0	31.1	30.1	30.1	31.5	32.4
3	26.4	24.7	23.1	22.1	22.0	21.4
7	73.6	75.3	76.9	77.9	78.0	78.6
4	56.6	58.1	58.4	58.3	57.8	57.1
1	19.2	19.1	19.5	19.7	20.3	20.7
4	14.1	13.8	13.7	13.7	13.9	14.2
0	5.9	5.5	5.3	5.3	5.1	5.2
2	4.2	3.5	3.2	3.0	2.9	2.8
8	94.6	95.0	95.5	96.1	96.4	96.8
6	90.2	91.3	89.8	90.4	90.6	91.1
0	4.4	3.7	5.7	5.7	5.8	5.7
4	3.9	3.3	3.1	2.8	2.5	2.1
2	0.1	0.1	0.1	0.1	0.0 [§]	0.0 [§]
7	1.4	1.6	1.3	1.0	1.0	1.1

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TABLE 1. Characteristics of women obtaining abortions, United States, 1972-1977

Characteristics	1972	1973	1974	1975	1976	1977
Weeks of gestation						
<6	34.0	36.1	42.6	44.6	47.0	51.2
6-10	30.7	29.4	28.7	28.4	28.0	27.2
11-12	17.5	17.9	15.4	14.9	14.4	13.1
13-15	8.4	6.9	5.5	5.0	4.5	3.4
16-20	8.2	8.0	6.5	6.1	5.1	4.3
≥21	1.3	1.7	1.2	1.0	0.9	0.9

* Abortions per 1,000 live births

† Abortions per 1,000 females 15-44 years of age

§ Excludes unknowns. Since the number of states reporting each characteristic varies from year to year

|| For years 1972-1977, data indicate number of living children.

† † <0.05%

1972-1983 — Continued

1978	1979	1980	1981	1982	1983
52.2	52.1	51.7	51.2	50.6	49.7
26.9	27.0	26.2	26.8	26.7	26.8
12.3	12.5	12.2	12.1	12.4	12.8
4.0	4.2	5.2	5.2	5.3	5.6
3.7	3.4	3.9	3.7	3.9	3.9
0.9	0.9	0.9	1.0	1.1	1.0

o year, temporal comparisons should be made with caution.

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TABLE 2. Source of abortion reporting, number of reported abortions, and abortion ratio and rate, by year, United States, selected years

	1972	1976	1980	1981	1982	1983
Number of reporting areas* that report data through central health agency	21	41	47	46	46	46
Number of reporting areas that report data through hospitals and other medical facilities	8	11	5	6	6	6
Total number of abortions reported to CDC	586,760	988,267	1,297,606	1,300,760	1,303,980	1,268,987
Abortion ratio (abortions per 1,000 live births)	180.1	312.0	359.2	358.4	354.3	348.7
Abortion rate (abortions per 1,000 females ages 15-44)	13	21	25	24	24	23

*The 52 reporting areas consist of 49 states, upstate New York, New York City, and the District of Columbia.

Approximately 93% of the women who obtained abortions had the procedure done in their state of residence. The percentage of abortions obtained by out-of-state residents ranged from approximately 55% in North Dakota to <1% in California and Hawaii for both 1982 and 1983 (Tables 3 and 4). However, the percentage of abortions obtained by out-of-state residents is unavailable for seven reporting areas in 1982 and for six in 1983.

In 1982 and 1983, 40 states and the District of Columbia reported legal abortions by age. In both years, women between 15 and 29 years of age had approximately 80% of all abortions, whereas females <15 years of age had approximately 1% of all abortions (Tables 5 and 6). The abortion ratios continued to be highest at the extremes of the reproductive-age spectrum. The abortion ratio for females <15 years of age was 1,337/1,000 live births in 1982 and 1,486/1,000 in 1983. In addition, the abortion ratios for females 15-19 years of age and ≥40 years of age were >700/1,000 live births for both years (Figure 2).

The percentage of all abortions obtained by teenagers continued to decrease. Teenagers had 29.2% of all abortions in 1980, 28.0% in 1981, and 27.1% in 1982 and 1983. As in previous years, among teenagers the abortion ratio was highest for females <15 years of age and lowest for females 19 years of age (Tables 7 and 8).

In 1982 and 1983, about half of the reported legal abortions were performed at ≤8 weeks of gestation (Tables 9 and 10). Moreover, approximately 90% were done at ≤12 weeks of gestation. In both years, less than 4% of reported legal abortions were performed at 16-20 weeks of gestation, and about 1% were performed at ≥21 weeks of gestation.

In both years, approximately 96% of legal abortions were done by curettage (Tables 11 and 12). In less than 3%, the method used was intrauterine saline or prostaglandin instillation.

In 1982 and 1983, approximately two-thirds of the women obtaining abortions were white (Table 13). The abortion ratio was higher for black and other races than for white: 523 versus 309 abortions/1,000 live births in 1982 and 497 versus 302/1,000 in 1983. The ratio was lower in 1983 than in 1982 for both racial groups.

FIGURE 1. Legal abortions, by year, United States, 1970-1983

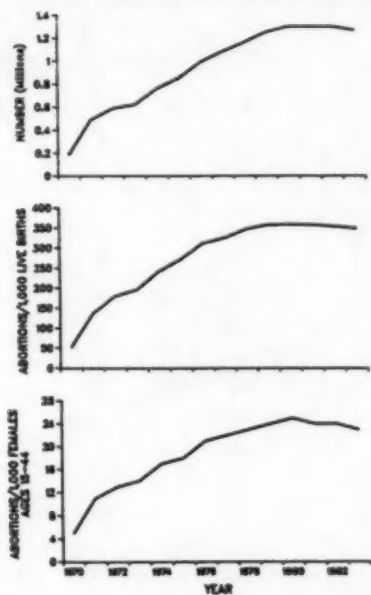


FIGURE 2. Abortion ratios, by age group, United States, 1982 and 1983

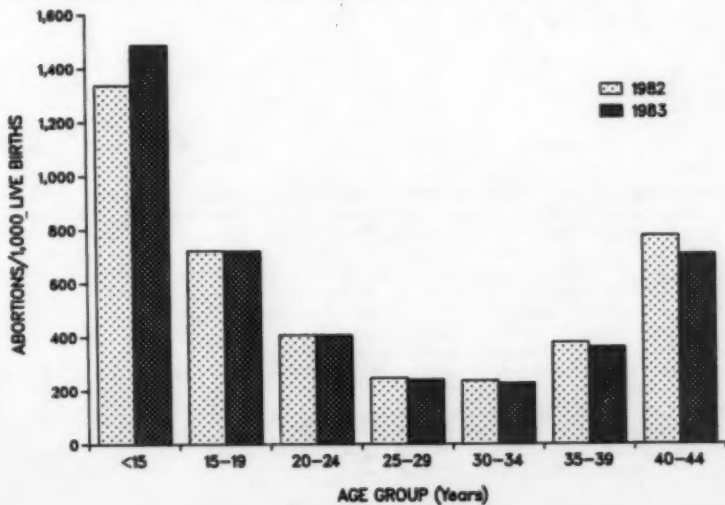


TABLE 3. Reported number of legal abortions, abortion ratios and rates, and percentage of abortions obtained by out-of-state residents, by state of occurrence, 1982

State	Abortions*	Ratios†	Rates‡	Percentage of abortions obtained by out-of-state residents¹
AK	1,930 †	171	17	—
AL	16,081 **	267	17	5.1
AR	6,779 ††	192	13	2.9
AZ	12,539	238	19	3.3
CA	207,099 §§	482	35	0.5
CO	16,685	305	23	7.1
CT	18,449	454	27	2.1
DC	24,207	11	11	48.7
DE	3,907	426	26	—
FL	64,553 §§	447	29	—
GA	33,213	368	24	10.3
HI	6,224	333	28	0.8
IA	5,360 **	120	8	7.6
ID	2,431	124	12	7.2
IL	66,613	363	24	3.2
IN	15,806	188	13	3.1
KS	9,976 ***	244	19	38.3
KY	10,830 †	191	12	—
LA	19,794	234	19	9.3
MA	40,394	533	29	—
MD	26,084	409	24	6.0
ME	2,844	170	10	14.9
MI	43,512	315	20	3.8
MN	17,758	259	17	12.4
MO	19,226	251	18	13.9
MS	5,145	112	9	7.2
MT	4,175	287	23	22.7
NC	31,798	370	23	5.9
ND	3,076	243	22	55.6
NE	5,698	211	15	21.9
NH	3,711 **	263	17	17.0
NJ	30,269	308	18	2.2
NM	5,213	189	17	3.7

(Continued on next page)

* Abortion data from central health agency unless otherwise noted

† Abortions per 1,000 live births (live-birth data from central health agency except for Alabama, Alaska, California, Delaware, Indiana, Iowa, Kansas, Kentucky, New Hampshire, Pennsylvania, West Virginia, and Wisconsin. Live-birth data for these states from the National Center for Health Statistics, Monthly Vital Statistics, Report, Vol. 33, No. 6, Supplemental, September 28, 1984)

‡ Abortions per 1,000 females ages 15-44 (number of females ages 15-44 from Bureau of the Census, Current Population Survey, March 1982 Tape Technical Documentation)

¹ Based on number of abortions for which residence status of woman is known

² Total reported from The Alan Guttmacher Institute

³ Reported from hospitals and/or other medical facilities in state

⁴ Includes 1,342 abortions to Arkansas residents occurring in other states

⁵ Total estimated by CDC

⁶ More than 1,000 abortions per 1,000 live births

⁷ More than 100 abortions per 1,000 females ages 15-44

⁸ Includes 633 abortions to Kansas residents occurring in other states

⁹ Reported from New York City Health Department

— Not reported

(Continued)

TABLE 3. Reported number of legal abortions, abortion ratios and rates, and percentage of abortions obtained by out-of-state residents, by state of occurrence, 1982

State	Abortions*	Ratios†	Rates‡	Percentage of abortions obtained by out-of-state residents§
NV	6,794	455	31	16.3
NY	164,733	676	40	5.2
(City)	105,466 †††	11		5.0
(Upstate)	59,267	426		5.6
OH	50,390	306	20	5.2
OK	12,424	211	19	5.9
OR	12,807	312	20	5.9
PA	60,772	375	23	6.4
RI	7,703	616	36	25.8
SC	12,616	256	15	6.4
SD	1,693	132	11	29.1
TN	20,729	309	18	18.7
TX	80,453	270	23	8.9
UT	3,987	96	12	6.0
VA	31,869	393	25	5.8
VT	3,498	436	27	26.0
WA	29,298	426	28	8.9
WI	19,412	261	17	—
WV	2,725 **	100	6	17.4
WY	698	63	6	—
Total	1,303,980	355	24	7.1

* Abortion data from central health agency unless otherwise noted

† Abortions per 1,000 live births (live-birth data from central health agency except for Alabama, Alaska, California, Delaware, Indiana, Iowa, Kansas, Kentucky, New Hampshire, Pennsylvania, West Virginia, and Wisconsin. Live-birth data for these states from the National Center for Health Statistics, Monthly Vital Statistics, Report, Vol. 33, No. 6, Supplemental, September 28, 1984)

§ Abortions per 1,000 females ages 15-44 (number of females ages 15-44 from Bureau of the Census, Current Population Survey, March 1982 Tape Technical Documentation)

† Based on number of abortions for which residence status of woman is known

‡ Total reported from The Alan Guttmacher Institute

** Reported from hospitals and/or other medical facilities in state

†† Includes 1,342 abortions to Arkansas residents occurring in other states

§§ Total estimated by CDC

|| More than 1,000 abortions per 1,000 live births

|| More than 100 abortions per 1,000 females ages 15-44

*** Includes 633 abortions to Kansas residents occurring in other states

††† Reported from New York City Health Department

— Not reported

TABLE 4. Reported number of legal abortions, abortion ratios and rates, and percentage of abortions obtained by out-of-state residents, by state of occurrence, 1983

State	Abortions*	Ratios†	Rates‡	Percentage of abortions obtained by out-of-state residents§
AK	1,930 ¶	161	16	—
AL	17,147 **	290	19	5.4
AR	6,532 ††	187	13	2.9
AZ	13,664	258	21	2.7
CA	209,481 §§	480	35	0.4
CO	16,793	307	21	5.8
CT	18,653	454	25	3.5
DC	22,867	11	11	48.3
DE	4,232	459	28	—
FL	64,444 §§	432	29	—
GA	34,514	383	26	9.2
HI	6,041	316	24	0.7
IA	5,534 **	128	9	8.4
ID	2,456	131	11	7.1
IL	65,434 ***	366	25	3.9
IN	13,898	172	11	3.2
KS	8,547 †††	212	16	37.7
KY	10,830 ¶	198	12	—
LA	19,435	236	19	11.6
MA	37,272	490	27	—
MD	25,732	402	25	6.3
ME	3,836	231	15	14.5
MI	40,528	305	18	3.9
MN	16,428	251	17	11.6
MO	19,199	254	18	13.5
MS	4,560	104	8	5.5
MT	4,061	289	21	24.5
NC	32,952	393	22	5.2
ND	3,028	245	21	52.7

(Continued on next page)

* Abortion data from central health agency unless otherwise noted

† Abortions per 1,000 live births (live-birth data from central health agency except for Alabama, Alaska, California, Connecticut, Delaware, Indiana, Iowa, Kansas, Kentucky, New Hampshire, Pennsylvania, West Virginia, and Wisconsin. Live-birth data for these states from the National Center for Health Statistics, Monthly Vital Statistics, Report, Vol. 34, No. 6, Supplemental, September 20, 1985)

‡ Abortions per 1,000 females ages 15-44 (number of females ages 15-44 from Bureau of the Census, Current Population Survey, March 1983 Tape Technical Documentation)

§ Based on number of abortions for which residence status of woman is known

¶ Total reported from The Alan Guttmacher Institute for 1982

** Reported from hospitals and/or other medical facilities in state

†† Includes 1,346 abortions to Arkansas residents occurring in other states

§§ Total estimated by CDC

|| More than 1,000 abortions per 1,000 live births

¶¶ More than 100 abortions per 1,000 females ages 15-44

*** Annual data are based on 9½ months of reported data from state health department.

††† Includes 674 abortions to Kansas residents occurring in other states

§§§ Reported from New York City Health Department

— Not reported

(Continued)

TABLE 4. Reported number of legal abortions, abortion ratios and rates, and percentage of abortions obtained by out-of-state residents, by state of occurrence, 1983

State	Abortions ^a	Ratios ^b	Rates ^c	Percentage of abortions obtained by out-of-state residents ^d
NE	5,625	214	15	21.2
NH	3,436 ^{**}	249	15	17.1
NJ	24,722	250	14	2.7
NM	5,182	188	16	3.4
NV	6,062	413	27	16.8
NY	154,712	632	37	4.7
(City)	100,322 ^{§§§}	953		4.2
(Upstate)	54,390	390		5.7
OH	44,709	282	18	5.6
OK	11,759	207	16	5.3
OR	12,064	302	19	6.7
PA	59,288	375	22	6.0
RI	6,984	555	32	22.6
SC	12,164	251	14	5.6
SD	1,691	135	11	26.9
TN	20,726	317	18	18.5
TX	81,112	275	22	7.0
UT	3,775	96	10	6.7
VA	31,339	388	24	5.6
VT	3,355	422	26	27.5
WA	27,856	401	26	7.2
WI	18,866	260	16	—
WV	2,821 ^{**}	109	6	16.4
WY	711	69	6	2.2
Total	1,268,987	349	23	6.7

^a Abortion data from central health agency unless otherwise noted^b Abortions per 1,000 live births (live-birth data from central health agency except for Alabama, Alaska, California, Connecticut, Delaware, Indiana, Iowa, Kansas, Kentucky, New Hampshire, Pennsylvania, West Virginia, and Wisconsin. Live-birth data for these states from the National Center for Health Statistics, Monthly Vital Statistics, Report, Vol. 34, No. 6, Supplemental, September 20, 1985)^c Abortions per 1,000 females ages 15-44 (number of females ages 15-44 from Bureau of the Census, Current Population Survey, March 1983 Tape Technical Documentation)^d Based on number of abortions for which residence status of woman is known^e Total reported from The Alan Guttmacher Institute for 1982^f Reported from hospitals and/or other medical facilities in state^g Includes 1,346 abortions to Arkansas residents occurring in other states^h Total estimated by CDCⁱ More than 1,000 abortions per 1,000 live births^j More than 100 abortions per 1,000 females ages 15-44^k Annual data are based on 9½ months of reported data from state health department.^l Includes 674 abortions to Kansas residents occurring in other states^m Reported from New York City Health Department

— Not reported

TABLE 5. Reported legal abortions, by age and state of occurrence,

State	<15		15-19		20-24		25-29		30	
	No.	%	No.	%	No.	%	No.	%	No.	%
AR	89	1.3	2,204	32.5	2,167	32.0	1,215	17.9	573	
AZ	108	0.9	3,362	26.8	4,585	36.6	2,447	19.5	1,064	
CA†	1,743	0.8	52,546	25.4	69,669	33.6	43,984	21.2	21,579	
CO	115	0.7	4,382	26.3	6,027	36.1	3,510	21.0	1,707	
CT	132	0.7	5,246	28.4	6,482	35.1	3,447	18.7	1,789	
DC	284	1.2	5,734	23.7	7,953	32.9	5,474	22.6	3,142	
GA	454	1.4	9,436	28.4	11,069	33.3	6,896	20.8	3,505	
HI	38	0.6	1,395	22.4	2,125	34.1	1,468	23.6	734	
ID	20	0.8	684	28.1	866	35.6	455	18.7	276	
IL	328	0.5	13,424	20.2	22,198	33.3	14,854	22.0	8,150	
IN	157	1.0	4,512	28.5	5,617	35.5	3,041	19.2	1,423	
KS	108	1.1	3,246	32.5	3,440	34.5	1,780	17.8	845	
LA	170	0.9	4,087	20.6	5,830	29.5	3,656	18.5	1,959	
MA	204	0.5	9,316	23.1	15,466	38.3	8,785	21.7	4,230	
MD	371	1.4	7,861	30.1	9,436	36.2	4,839	18.6	2,389	
ME	26	0.9	787	27.7	1,066	37.5	504	17.7	277	
MI	589	1.4	12,932	29.7	15,208	35.0	8,387	19.3	4,080	
MN	97	0.5	4,982	28.1	6,826	38.4	3,292	18.5	1,636	
MO	191	1.0	5,565	28.9	6,523	33.9	3,763	19.6	2,014	
MS	81	1.6	1,557	30.3	1,821	35.4	941	18.3	465	
MT	25	0.6	1,116	26.7	1,580	37.8	806	19.3	394	
NC	416	1.3	9,516	29.9	11,401	35.9	5,888	18.5	2,799	
ND	13	0.4	1,035	33.6	1,155	37.5	481	15.6	240	
NE	42	0.7	1,768	31.0	2,111	37.0	1,023	18.0	448	
NJ	349	1.2	7,643	25.3	10,434	34.5	6,159	20.3	3,375	
NM	38	0.7	1,396	26.8	1,804	34.6	1,077	20.7	580	
NV	58	0.9	1,785	26.3	2,204	32.4	1,542	22.7	789	
NY	1,324	0.8	38,266	23.2	55,376	33.6	35,394	21.5	20,327	
(City)	902	0.9	20,538	19.5	34,109	32.3	25,270	24.0	14,872	
(Upstate)	422	0.7	17,728	29.9	21,267	35.9	10,124	17.1	5,455	
OH	264	0.5	11,651	23.1	18,634	37.0	10,514	20.9	5,196	
OK	119	1.0	3,484	28.0	4,569	36.8	2,443	19.7	1,128	
OR	94	0.7	3,144	24.5	3,632	28.4	2,203	17.2	1,090	
PA	592	1.0	16,649	27.4	22,210	36.5	12,010	19.8	5,883	

ance, selected states*, 1982

30-34		35-39		≥40		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
573	8.5	280	4.1	109	1.6	142	2.1	6,779	100.0
064	8.5	419	3.3	128	1.0	426	3.4	12,539	100.0
579	10.4	9,320	4.5	3,119	1.5	5,139	2.5	207,099	100.0
707	10.2	646	3.9	167	1.0	131	0.8	16,685	100.0
789	9.7	899	4.9	236	1.3	218	1.2	18,449	100.0
1,142	13.0	1,144	4.7	260	1.1	216	0.9	24,207	100.0
5,505	10.6	1,461	4.4	387	1.2	1	0.0	33,213	100.0
734	11.8	344	5.5	118	1.9	2	0.0	6,224	100.0
276	11.4	92	3.8	30	1.2	8	0.3	2,431	100.0
1,150	12.2	3,898	5.9	1,384	2.1	2,577	3.9	66,613	100.0
423	9.0	627	4.0	202	1.3	227	1.4	15,806	100.0
845	8.5	422	4.2	128	1.3	7	0.1	9,976	100.0
959	9.9	886	4.5	275	1.4	2,931	14.8	19,794	100.0
2,230	10.5	1,856	4.6	522	1.3	15	0.0	40,394	100.0
2,389	9.2	931	3.6	257	1.0	0	0.0	26,084	100.0
277	9.7	121	4.3	33	1.2	30	1.1	2,844	100.0
1,080	9.4	1,707	3.9	478	1.1	131	0.3	43,512	100.0
1,636	9.2	665	3.7	201	1.1	59	0.3	17,758	100.0
2,014	10.5	882	4.6	287	1.5	1	0.0	19,226	100.0
465	9.0	217	4.2	60	1.2	3	0.1	5,145	100.0
394	9.4	182	4.4	72	1.7	0	0.0	4,175	100.0
2,799	8.8	1,245	3.9	393	1.2	140	0.4	31,798	100.0
240	7.8	104	3.4	48	1.6	0	0.0	3,076	100.0
448	7.9	229	4.0	76	1.3	1	0.0	5,698	100.0
3,375	11.2	1,709	5.6	587	1.9	13	0.0	30,269	100.0
580	11.1	231	4.4	71	1.4	16	0.3	5,213	100.0
789	11.6	323	4.8	93	1.4	0	0.0	6,794	100.0
0,327	12.3	10,191	6.2	2,988	1.8	867	0.5	164,733	100.0
4,872	14.1	7,220	6.8	2,094	2.0	461	0.4	105,466	100.0
5,455	9.2	2,971	5.0	894	1.5	406	0.7	59,267	100.0
5,196	10.3	2,166	4.3	797	1.8	1,168	2.3	50,390	100.0
1,128	9.1	492	4.0	175	1.4	14	0.1	12,424	100.0
1,090	8.5	441	3.4	112	0.9	2,091	16.3	12,807	100.0
5,883	9.7	2,490	4.1	835	1.4	103	0.2	60,772	100.0

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TABLE 5. Reported legal abortions, by age and state of occurrence

State	<15		15-19		20-24		25-29	
	No.	%	No.	%	No.	%	No.	%
RI	36	0.5	2,202	28.6	2,821	36.6	1,429	18.6
SC	151	1.2	3,701	29.3	4,336	34.4	2,450	19.4
SD	13	0.8	545	32.2	576	34.0	302	17.8
TN	248	1.2	6,234	30.1	7,152	34.5	3,899	18.8
UT [§]	19	0.5	875	23.4	1,345	35.9	805	21.5
VA	354	1.1	9,142	28.7	11,209	35.2	6,246	19.6
VT	24	0.7	1,032	29.5	1,299	37.1	632	18.1
WA	201	0.7	7,815	26.7	10,226	34.9	6,223	21.2
WY	8	1.1	178	25.5	263	37.7	167	23.9
TOTAL	9,693	0.9	282,437	25.8	378,711	34.6	224,233	20.5
Abortion ratio[‡]	1,337		722		407		247	

* All states for which data are available (40) and the District of Columbia

† Distribution based on data from state health department survey of hospitals

§ Residents only

‡ Calculated as the number of legal abortions obtained by women in a given "Unknown" age for each state is distributed according to known age distribution 15% of abortions.

Prevalence, selected states*, 1982 — Continued

30-34		35-39		≥40		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
736	9.6	355	4.6	119	1.5	5	0.1	7,703	100.0
1,274	10.1	545	4.3	150	1.2	9	0.1	12,616	100.0
150	8.9	59	3.5	25	1.5	23	1.4	1,693	100.0
2,017	9.7	905	4.4	271	1.3	3	0.0	20,729	100.0
421	11.2	155	4.1	40	1.1	84	2.2	3,744	100.0
3,042	9.5	1,412	4.4	418	1.3	46	0.1	31,869	100.0
344	9.8	128	3.7	38	1.1	1	0.0	3,498	100.0
3,188	10.9	1,244	4.2	370	1.3	31	0.1	29,298	100.0
49	7.0	23	3.3	10	1.4	0	0.0	698	100.0
115,307	10.5	51,446	4.7	16,069	1.5	16,879	1.5	1,094,775	100.0
237		379		777				374	

* Hospitals and clinics; total estimated by CDC

† Given age group per 1,000 live births to women in the same age group.
‡ Distribution for that state. Excludes states reporting age unknown for more than

TABLE 6. Reported legal abortions, by age and state of occurrence,

State	<15		15-19		20-24		25-29		30
	No.	%	No.	%	No.	%	No.	%	No.
AR	108	1.7	2,082	31.9	2,122	32.5	1,176	18.0	540
AZ	97	0.7	3,382	24.8	5,008	36.7	2,796	20.5	1,250
CA†	2,087	1.0	52,639	25.1	70,352	33.6	44,108	21.1	23,074
CO	126	0.8	4,376	26.1	6,047	36.0	3,586	21.4	1,762
CT	156	0.8	5,265	28.2	6,537	35.0	3,520	18.9	1,835
DC	313	1.4	4,981	21.8	7,619	33.3	5,143	22.5	3,040
GA	460	1.3	9,609	27.8	11,707	33.9	7,027	20.4	3,664
HI	44	0.7	1,277	21.1	2,071	34.3	1,333	22.1	806
ID	23	0.9	727	29.6	831	33.8	472	19.2	235
IL‡	524	0.8	14,290	21.8	19,740	30.2	12,544	19.2	6,863
IN	149	1.1	3,617	26.0	5,070	36.5	2,761	19.9	1,340
KS	91	1.1	2,734	32.0	2,978	34.8	1,539	18.0	711
LA	202	1.0	4,146	21.3	5,840	30.0	3,848	19.8	2,050
MA	194	0.5	8,687	23.3	14,058	37.7	7,896	21.2	4,111
MD	387	1.5	7,452	29.0	9,310	36.2	4,991	19.4	2,353
ME	26	0.7	1,135	29.6	1,364	35.6	712	18.6	377
MI	593	1.5	12,386	30.6	13,922	34.4	7,767	19.2	3,761
MN	112	0.7	4,469	27.2	6,264	38.1	3,162	19.2	1,501
MO	230	1.2	5,341	27.8	6,662	34.7	3,794	19.8	2,011
MS	91	2.0	1,338	29.3	1,549	34.0	878	19.3	451
MT	28	0.7	1,051	25.9	1,535	37.8	811	20.0	411
NC	502	1.5	9,790	29.7	11,528	35.0	6,193	18.8	3,021
ND	18	0.6	990	32.7	1,178	38.9	436	14.4	221
NE	40	0.7	1,692	30.1	2,059	36.6	1,081	19.2	471
NJ	296	1.2	6,064	24.5	8,519	34.5	5,078	20.5	2,741
NM	42	0.8	1,297	25.0	1,791	34.6	1,056	20.4	631
NV	42	0.7	1,454	24.0	1,960	32.3	1,386	22.9	771
NY	1,421	0.9	35,390	22.9	51,770	33.5	33,879	21.9	19,081
(City)	988	1.0	19,508	19.4	32,375	32.3	24,229	24.2	14,021
(Upstate)	433	0.8	15,882	29.2	19,395	35.7	9,650	17.7	5,060
OH	282	0.6	10,521	23.5	16,040	35.9	9,094	20.3	4,611
OK	104	0.9	3,293	28.0	4,070	34.6	2,404	20.4	1,151
OR	75	0.6	2,676	23.8	3,394	28.1	2,060	17.1	1,051
PA	677	1.1	15,659	26.4	21,651	36.5	12,121	20.4	5,901

nce, selected states*, 1983

30-34		35-39		≥40		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
540	8.3	287	4.4	97	1.5	120	1.8	6,532	100.0
1,250	9.1	464	3.4	135	1.0	532	3.9	13,664	100.0
3,074	11.0	10,980	5.2	3,074	1.5	3,167	1.5	209,481	100.0
1,762	10.5	650	3.9	172	1.0	74	0.4	16,793	100.0
1,835	9.8	899	4.8	270	1.4	171	0.9	18,653	100.0
3,040	13.3	1,312	5.7	348	1.5	111	0.5	22,867	100.0
3,664	10.6	1,610	4.7	436	1.3	1	0.0	34,514	100.0
806	13.3	401	6.6	101	1.7	8	0.1	6,041	100.0
235	9.6	124	5.0	38	1.5	6	0.2	2,456	100.0
6,863	10.5	3,307	5.1	1,108	1.7	7,058	10.8	65,434	100.0
1,346	9.7	604	4.3	168	1.2	183	1.3	13,898	100.0
718	8.4	374	4.4	105	1.2	8	0.1	8,547	100.0
2,056	10.6	853	4.4	253	1.3	2,237	11.5	19,435	100.0
4,114	11.0	1,815	4.9	493	1.3	15	0.0	37,272	100.0
2,355	9.2	990	3.8	247	1.0	0	0.0	25,732	100.0
371	9.7	159	4.1	54	1.4	15	0.4	3,836	100.0
3,766	9.3	1,571	3.9	420	1.0	103	0.3	40,528	100.0
1,502	9.1	674	4.1	205	1.2	40	0.2	16,428	100.0
2,014	10.5	889	4.6	266	1.4	3	0.0	19,199	100.0
451	9.9	192	4.2	58	1.3	3	0.1	4,560	100.0
417	10.3	171	4.2	48	1.2	0	0.0	4,061	100.0
3,022	9.2	1,334	4.0	384	1.2	199	0.6	32,952	100.0
228	7.5	128	4.2	50	1.7	0	0.0	3,028	100.0
471	8.4	215	3.8	65	1.2	2	0.0	5,625	100.0
2,748	11.1	1,508	6.1	487	2.0	22	0.1	24,722	100.0
631	12.2	280	5.4	65	1.3	20	0.4	5,182	100.0
775	12.8	355	5.9	90	1.5	0	0.0	6,062	100.0
19,090	12.3	9,369	6.1	2,911	1.9	882	0.6	154,712	100.0
14,029	14.0	6,722	6.7	2,017	2.0	454	0.5	100,322	100.0
5,061	9.3	2,647	4.9	894	1.6	428	0.8	54,390	100.0
4,611	10.3	2,111	4.7	746	1.7	1,304	2.9	44,709	100.0
1,158	9.8	563	4.8	152	1.3	15	0.1	11,759	100.0
1,051	8.7	488	4.0	109	0.9	2,011	16.7	12,064	100.0
5,804	9.8	2,549	4.3	731	1.2	96	0.2	59,288	100.0

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TABLE 6. Reported legal abortions, by age and state of occurrence,

State	<15		15-19		20-24		25-29		30-
	No.	%	No.	%	No.	%	No.	%	No.
RI	45	0.6	1,816	28.0	2,657	38.0	1,312	18.8	714
SC	162	1.3	3,477	28.6	4,200	34.5	2,409	19.8	1,203
SD	8	0.5	518	30.6	593	35.1	319	18.9	142
TN	283	1.4	6,090	29.4	6,982	33.7	4,119	19.9	2,041
UT [†]	20	0.6	845	24.0	1,253	35.6	754	21.4	409
VA	376	1.2	8,800	28.1	11,000	35.1	6,198	19.8	3,060
VT	15	0.4	951	28.3	1,296	38.6	583	17.4	314
WA	226	0.8	7,229	26.0	9,644	34.6	5,963	21.4	3,022
WY	4	0.6	187	26.3	258	36.3	160	22.5	67
TOTAL	10,679	1.0	269,923	25.5	362,429	34.2	216,469	20.5	112,740
Abortion ratio[‡]	1,486		727		406		240		226

* All states for which data are available (40) and the District of Columbia

† Distribution based on data from state health department survey of hospitals and

‡ Annual data are based on 9½ months of reported data from state health department

§ Residents only

† Calculated as the number of legal abortions obtained by women in a given age group for each state is distributed according to known age distribution for that state abortions.

ce, selected states*, 1983 — Continued

30-34		35-39		≥40		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
714	10.2	339	4.9	97	1.4	4	0.1	6,984	100.0
203	9.9	541	4.4	165	1.4	7	0.1	12,164	100.0
142	8.4	68	4.0	30	1.8	13	0.8	1,691	100.0
041	9.8	947	4.6	260	1.3	4	0.0	20,726	100.0
409	11.6	173	4.9	50	1.4	13	0.4	3,517	100.0
060	9.8	1,471	4.7	399	1.3	35	0.1	31,339	100.0
314	9.4	151	4.5	44	1.3	1	0.0	3,355	100.0
022	10.8	1,375	4.9	371	1.3	26	0.1	27,856	100.0
67	9.4	28	3.9	5	0.7	2	0.3	711	100.0
740	10.7	52,319	4.9	15,307	1.4	18,511	1.7	1,058,377	100.0
226		361		707		366			

and clinics; total estimated by CDC
Department.

group per 1,000 live births to women in the same age group. "Unknown"
state. Excludes states reporting age unknown for more than 15% of

TABLE 7. Reported legal abortions obtained by teenagers, by a

State	<15		15		16		M
	No.	%	No.	%	No.	%	
AR	89	3.9	130	5.7	334	14.6	4
AZ	108	3.1	199	5.7	413	11.9	5
CA†	1,743	3.2	3,800	7.0	8,046	14.8	11.2
CO	115	2.6	239	5.3	599	13.3	9
CT	132	2.5	299	5.6	726	13.5	1.1
GA	454	4.6	683	6.9	1,394	14.1	1.8
HI	8	2.7	79	5.5	153	10.7	3
ID	20	2.8	43	6.1	73	10.4	1
IL	328	2.4	730	5.3	1,508	11.0	2.8
IN	157	3.4	356	7.6	586	12.6	7
KS	108	3.2	244	7.3	503	15.0	6
LA	170	4.0	262	6.2	420	9.9	5
MA	204	2.1	493	5.2	877	9.2	1.2
MD	371	4.5	661	8.0	1,172	14.2	1.5
ME	26	3.2	48	5.9	89	10.9	1
MN	97	1.9	252	5.0	609	12.0	8
MO	191	3.3	412	7.2	771	13.4	1.3
MS	81	4.9	125	7.6	231	14.1	3
MT	25	2.2	67	5.9	115	10.1	1
NC	416	4.2	761	7.7	1,423	14.3	1.5
ND	13	1.2	47	4.5	123	11.7	1
NE	42	2.3	99	5.5	266	14.7	3
NV	58	3.1	108	5.9	271	14.7	3
NY	1,324	3.3	2,599	6.6	5,062	12.8	7.0
(City)	902	4.2	1,626	7.6	2,908	13.6	4.0
(Upstate)	422	2.3	973	5.4	2,154	11.9	3.0
OH	264	2.2	593	5.0	1,299	10.9	2.0
OK	119	3.3	195	5.4	424	11.8	1
OR	94	2.9	232	7.2	453	14.0	1
PA	592	3.4	1,176	6.8	2,297	13.3	3.0
RI	36	1.6	110	4.9	298	13.3	1
SC	151	3.9	246	6.4	550	14.3	1
SD	13	2.3	32	5.7	85	15.2	1
TN	248	3.8	441	6.8	831	12.8	1.0

by age, selected states*, 1982

17		18		19		Total	
No.	%	No.	%	No.	%	No.	%
467	20.4	677	29.5	596	26.0	2,293	100.0
571	16.5	1,096	31.6	1,083	31.2	3,470	100.0
11,204	20.6	13,628	25.1	15,868	29.2	54,289	100.0
956	21.3	1,206	26.8	1,382	30.7	4,497	100.0
1,174	21.8	1,530	28.4	1,517	28.2	5,378	100.0
1,933	19.5	2,673	27.0	2,755	27.9	9,892	100.0
311	21.7	383	26.7	469	32.7	1,433	100.0
124	17.6	218	31.0	226	32.1	704	100.0
2,602	18.9	3,793	27.6	4,791	34.8	13,752	100.0
796	17.0	1,415	30.3	1,359	29.1	4,669	100.0
691	20.6	881	26.3	927	27.6	3,354	100.0
533	12.5	1,530	35.9	1,342	31.5	4,257	100.0
1,232	12.9	3,146	33.0	3,568	37.5	9,520	100.0
1,595	19.4	2,268	27.6	2,165	26.3	8,232	100.0
154	18.9	236	29.0	260	32.0	813	100.0
849	16.7	1,559	30.7	1,713	33.7	5,079	100.0
1,211	21.0	1,630	28.3	1,541	26.8	5,756	100.0
342	20.9	435	26.6	424	25.9	1,638	100.0
180	15.8	343	30.1	411	36.0	1,141	100.0
1,965	19.8	2,716	27.3	2,651	26.7	9,932	100.0
165	15.7	366	34.9	334	31.9	1,048	100.0
363	20.1	513	28.3	527	29.1	1,810	100.0
396	21.5	523	28.4	487	26.4	1,843	100.0
7,684	19.4	11,325	28.6	11,596	29.3	39,590	100.0
4,035	18.8	5,775	26.9	6,194	28.9	21,440	100.0
3,649	20.1	5,550	30.6	5,402	29.8	18,150	100.0
2,254	18.9	3,276	27.5	4,229	35.5	11,915	100.0
572	15.9	1,265	35.1	1,028	28.5	3,603	100.0
675	20.8	877	27.1	907	28.0	3,238	100.0
3,359	19.5	4,837	28.1	4,980	28.9	17,241	100.0
512	22.9	641	28.6	641	28.6	2,238	100.0
783	20.3	1,096	28.5	1,026	26.6	3,852	100.0
110	19.7	159	28.5	159	28.5	558	100.0
1,156	17.8	1,940	29.9	1,866	28.8	6,482	100.0

TABLE 7. Reported legal abortions obtained by teenagers, by age, sex

State	<15		15		16		17	
	No.	%	No.	%	No.	%	No.	%
UT [§]	19	2.1	69	7.7	85	9.5	169	11.3
VA	354	3.7	618	6.5	1,278	13.5	1,891	14.1
VT	24	2.3	48	4.5	123	11.6	206	11.3
WA	201	2.5	553	6.9	1,087	13.6	1,578	14.1
WY	8	4.3	13	7.0	21	11.3	32	11.3
TOTAL	8,433	3.2	17,062	6.5	34,595	13.1	50,795	13.1
Abortion ratio	1,285		991		875		745	

* All states for which data are available (37)

† Distribution based on data from state health department survey of hospitals and clinics

§ Residents only

|| Calculated as the number of legal abortions obtained by women of a given age per 1,000 live births; each state is distributed according to known age distribution for that state.

, selected states*, 1982 — Continued

17		18		19		Total	
%	No.	%	No.	%	No.	%	
18.9	257	28.7	295	33.0	894	100.0	
19.9	2,674	28.2	2,681	28.2	9,496	100.0	
19.5	314	29.7	341	32.3	1,056	100.0	
19.7	2,319	28.9	2,278	28.4	8,016	100.0	
17.2	38	20.4	74	39.8	186	100.0	
19.3	73,783	28.0	78,497	29.8	263,165	100.0	
	734		601		726		

and clinics; total estimated by CDC

a per 1,000 live births to women of the same age. "Unknown" age for

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TABLE 8. Reported legal abortions obtained by teenagers, by a

State	<15		15		16		N
	No.	%	No.	%	No.	%	
AR	108	4.9	167	7.6	286	13.1	4
AZ	97	2.8	186	5.3	383	11.0	4
CA†	2,087	3.8	3,975	7.3	8,362	15.3	10,2
CO	126	2.8	260	5.8	604	13.4	9
CT	156	2.9	317	5.8	812	15.0	1,1
GA	460	4.6	743	7.4	1,404	13.9	2,0
HI	44	3.3	64	4.8	134	10.1	2
ID	23	3.1	41	5.5	89	11.9	1
IL‡	524	3.5	1,013	6.8	2,010	13.6	2,9
IN	149	4.0	269	7.1	438	11.6	5
KS	91	3.2	207	7.3	392	13.9	5
LA	202	4.6	319	7.3	465	10.7	5
MD	387	4.9	598	7.6	1,085	13.8	1,4
ME	26	2.2	67	5.8	156	13.4	2
MO	230	4.1	429	7.7	723	13.0	9
MS	91	6.4	118	8.3	189	13.2	2
MT	28	2.6	50	4.6	113	10.5	1
NC	502	4.9	821	8.0	1,410	13.7	2,0
ND	18	1.8	44	4.4	96	9.5	1
NE	40	2.3	113	6.5	225	13.0	3
NM	42	3.1	71	5.3	165	12.3	2
NV	42	2.8	91	6.1	193	12.9	3
NY	1,421	3.9	2,448	6.7	4,690	12.7	6,1
(City)	988	4.8	1,613	7.9	2,697	13.2	3,1
(Upstate)	433	2.7	835	5.1	1,993	12.2	3,1
OH	282	2.6	549	5.1	1,199	11.1	1,1
OK	104	3.1	206	6.1	410	12.1	1
OR	75	2.5	198	6.7	413	14.0	1
PA	677	4.1	1,190	7.3	2,192	13.4	2,1
RI	45	2.4	96	5.2	165	8.9	1
SC	162	4.5	233	6.4	526	14.5	1
SD	8	1.5	29	5.5	79	15.0	1
TN	283	4.4	463	7.3	779	12.2	1,1
UT	20	2.3	52	6.0	115	13.3	1

by age, selected states*, 1983

17		18		19		Total	
No.	%	No.	%	No.	%	No.	%
407	18.6	630	28.8	592	27.0	2,190	100.0
452	13.0	1,138	32.7	1,223	35.2	3,479	100.0
10,235	18.7	14,759	27.0	15,308	28.0	54,726	100.0
906	20.1	1,226	27.2	1,380	30.7	4,502	100.0
1,187	21.9	1,432	26.4	1,517	28.0	5,421	100.0
2,037	20.2	2,709	26.9	2,716	27.0	10,069	100.0
240	18.2	387	29.3	452	34.2	1,321	100.0
103	13.7	251	33.5	243	32.4	750	100.0
2,906	19.6	4,185	28.3	4,176	28.2	14,814	100.0
566	15.0	1,195	31.7	1,149	30.5	3,766	100.0
579	20.5	772	27.3	784	27.8	2,825	100.0
546	12.6	1,468	33.8	1,348	31.0	4,348	100.0
1,412	18.0	2,097	26.8	2,260	28.8	7,839	100.0
245	21.1	310	26.7	357	30.7	1,161	100.0
928	16.7	1,682	30.2	1,579	28.3	5,571	100.0
275	19.2	399	27.9	357	25.0	1,429	100.0
183	17.0	340	31.5	365	33.8	1,079	100.0
2,024	19.7	2,769	26.9	2,766	26.9	10,292	100.0
153	15.2	331	32.8	366	36.3	1,008	100.0
338	19.5	489	28.2	527	30.4	1,732	100.0
242	18.1	430	32.1	389	29.1	1,339	100.0
320	21.4	441	29.5	409	27.3	1,496	100.0
6,948	18.9	10,246	27.8	11,058	30.0	36,811	100.0
3,922	19.1	5,360	26.2	5,916	28.9	20,496	100.0
3,026	18.5	4,886	29.9	5,142	31.5	16,315	100.0
1,975	18.3	2,995	27.7	3,803	35.2	10,803	100.0
556	16.4	1,133	33.4	988	29.1	3,397	100.0
590	20.0	844	28.6	831	28.2	2,951	100.0
2,943	18.0	4,480	27.4	4,854	29.7	16,336	100.0
253	13.6	622	33.4	680	36.5	1,861	100.0
721	19.8	1,007	27.7	990	27.2	3,639	100.0
103	19.6	154	29.3	153	29.1	526	100.0
1,074	16.9	1,911	30.0	1,863	29.2	6,373	100.0
122	14.1	297	34.3	259	29.9	865	100.0

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TABLE 8. Reported legal abortions obtained by teenagers, by age,

State	<15		15		16		No.
	No.	%	No.	%	No.	%	
VA	376	4.1	705	7.7	1,253	13.7	1,785
VT	15	1.6	61	6.3	106	11.0	200
WA	226	3.0	503	6.7	995	13.3	1,439
WY	4	2.1	14	7.3	23	12.0	38
TOTAL	9,171	3.8	16,710	6.9	32,679	13.5	45,031
Abortion ratio[†]	1,426		1,020		883		719

* All states for which data are available (36)

† Distribution based on data from state health department survey of hospitals and health care facilities

§ Annual data are based on 9½ months of reported data from state health departments

|| Residents only

† Calculated as the number of legal abortions obtained by women of a given age in each state is distributed according to known age distribution for that state.

age, selected states*, 1983 — Continued

17		18		19		Total	
No.	%	No.	%	No.	%	No.	%
785	19.5	2,466	26.9	2,591	28.2	9,176	100.0
200	20.7	270	28.0	314	32.5	966	100.0
439	19.3	2,049	27.5	2,243	30.1	7,455	100.0
38	19.9	39	20.4	73	38.2	191	100.0
031	18.6	67,953	28.0	70,963	29.3	242,507	100.0
719		735		583		720	

hospitals and clinics; total estimated by CDC
department.

age per 1,000 live births to women of the same age. "Unknown" age for

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TABLE 9. Reported legal abortions, by weeks of gestation and

State	<8		9-10		11-12		13
	No.	%	No.	%	No.	%	No.
AR	4,190	61.8	1,358	20.0	630	9.3	255
AZ†	5,253	41.9	3,435	27.4	1,876	15.0	1,127
CA [§]	82,003	39.6	54,537	26.3	27,872	13.5	15,903
CO	5,936	35.6	5,710	34.2	2,605	15.6	1,104
CT†	8,443	45.8	5,832	31.6	2,529	13.7	463
DC	12,894	53.3	5,588	23.1	2,535	10.5	1,435
GA	15,416	46.4	8,687	26.2	4,377	13.2	990
HI	3,295	52.9	1,618	26.0	678	10.9	336
ID	1,133	46.6	718	29.5	426	17.5	138
IL†	34,635	52.0	20,470	30.7	8,421	12.6	1,385
IN	10,228	64.7	3,920	24.8	1,254	7.9	35
KS†	3,265	32.7	2,650	26.6	1,785	17.9	765
LA	9,816	49.6	4,514	22.8	2,089	10.6	1,212
MD	13,868	53.2	7,180	27.5	3,448	13.2	629
ME†	1,556	54.7	916	32.2	297	10.4	23
MI	18,450	42.4	11,832 [§]	27.2	5,465 [§]	12.6	3,770 [§]
MN	8,188	46.1	4,841	27.3	2,305	13.0	1,235
MO	7,366	38.3	6,097	31.7	3,274	17.0	1,247
MS	2,303	44.8	1,622	31.5	788	15.3	275
MT	1,290	30.9	1,583	37.9	847	20.3	211
NC	13,524	42.5	8,761	27.6	4,766	15.1	2,541
ND	1,714	55.7	907	29.5	333	10.8	93
NJ	15,700	51.9	7,032	23.2	3,250	10.7	2,004
NM	2,320	44.5	1,522	29.2	708	13.6	402
NV	4,733	69.7	1,047	15.4	570	8.4	250
NY	84,636	51.4	40,502	24.6	18,662	11.3	8,281
(City)	55,566	52.7	24,514	23.2	11,407	10.8	5,523
(Upstate)	29,070	49.0	15,988	27.0	7,255	12.2	2,758
OH	29,852	59.2	5,551	11.0	1,475	2.9	547
OK	6,158	49.6	3,423	27.6	1,708	13.7	402
OR	5,930	46.3	3,731 [§]	29.1	1,724 [§]	13.5	734 [§]
PA	37,255	61.3	14,367	23.6	4,952	8.1	1,933
RI	3,471	45.1	2,729	35.4	899	11.7	373
SC†	7,243	57.4	3,437	27.2	1,377	10.9	436

and state of occurrence, selected states*, 1982

13-15		16-20		>21		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
55	3.8	205	3.0	114	1.7	27	0.4	6,779	100.0
27	9.0	492	3.9	40	0.3	316	2.5	12,539	100.0
03	7.7	12,049	5.8	3,421	1.7	11,314	5.5	207,099	100.0
04	6.6	1,013	6.1	130	0.8	187	1.1	16,685	100.0
63	2.5	171	0.9	16	0.1	995	5.4	18,449	100.0
35	5.9	574 ¹	2.4	173 ¹	0.7	1,008	4.2	24,207	100.0
90	3.0	1,349	4.1	1,176	3.5	1,218	3.7	33,213	100.0
36	5.4	252	4.0	36	0.6	9	0.1	6,224	100.0
38	5.7	6	0.2	1	0.0	9	0.4	2,431	100.0
85	2.1	609	0.9	10	0.0	1,083	1.6	66,613	100.0
35	0.2	52	0.3	2	0.0	315	2.0	15,806	100.0
75	7.7	790	7.9	664	6.7	57	0.6	9,976	100.0
12	6.1	468	2.4	2	0.0	1,693	8.6	19,794	100.0
29	2.4	909	3.5	49	0.2	1	0.0	26,084	100.0
23	0.8	32	1.1	0	0.0	20	0.7	2,844	100.0
70 ¹	8.7	2,476 ¹	5.7	758	1.7	761	1.7	43,512	100.0
35	7.0	962	5.4	227	1.3	0	0.0	17,758	100.0
247	6.5	423	2.2	55	0.3	764	4.0	19,226	100.0
275	5.3	25	0.5	14	0.3	118	2.3	5,145	100.0
211	5.1	74	1.8	4	0.1	166	4.0	4,175	100.0
541	8.0	1,108	3.5	153	0.5	925	2.9	31,798	100.0
93	3.0	18	0.6	0	0.0	11	0.4	3,076	100.0
004	6.6	2,117	7.0	166	0.5	0	0.0	30,269	100.0
402	7.7	223	4.3	0	0.0	38	0.7	5,213	100.0
250	3.7	153	2.3	19	0.3	22	0.3	6,794	100.0
281	5.0	7,857	4.8	3,015	1.8	1,780	1.1	164,733	100.0
523	5.2	5,834	5.5	2,415	2.3	207	0.2	105,466	100.0
758	4.7	2,023	3.4	600	1.0	1,573	2.7	59,267	100.0
547	1.1	345 ¹	0.7	206 ¹	0.4	12,414	24.6	50,390	100.0
402	3.2	32	0.3	26	0.2	675	5.4	12,424	100.0
734 ¹	5.7	383 ¹	3.0	42	0.3	263	2.1	12,807	100.0
933	3.2	1,967	3.2	59	0.1	239	0.4	60,772	100.0
373	4.8	224	2.9	3	0.0	4	0.1	7,703	100.0
436	3.5	92	0.7	6	0.0	25	0.2	12,616	100.0

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TABLE 9. Reported legal abortions, by weeks of gestation and state

State	<8		9-10		11-12		13-15	
	No.	%	No.	%	No.	%	No.	%
TN	8,336	40.2	6,482	31.3	3,955	19.1	1,108	5.4
UT†	1,622	43.3	1,297	34.6	512	13.7	243	6.4
VA†	18,311	57.5	7,695	24.1	3,759	11.8	510	1.6
VT	2,153	61.5	915	26.2	338	9.7	76	2.2
WA†	17,767	60.6	7,026	24.0	2,974	10.2	705	2.4
WY†	467	66.9	179	25.6	46	6.6	2	0.3
TOTAL	510,720	48.8	269,711	25.8	125,529	12.0	53,178	5.4

* All states for which data are available (37) and the District of Columbia

† Weeks of gestation is physician's estimate.

‡ Distribution based on data from state health department survey of hospitals and clinics

§ Reallocation of reported abortions into comparable categories based on percent distribution in

31 states

¶ Residents only

State of occurrence, selected states*, 1982 — Continued

1-15		16-20		>21		Unknown		Total	
%	No.	%	No.	%	No.	%	No.	%	
5.3	246	1.2	81	0.4	521	2.5	20,729	100.0	
6.5	65	1.7	4	0.1	1	0.0	3,744	100.0	
1.6	1,106	3.5	96	0.3	392	1.2	31,869	100.0	
2.2	10	0.3	1	0.0	5	0.1	3,498	100.0	
2.4	708	2.4	92	0.3	26	0.1	29,298	100.0	
0.3	1	0.1	0	0.0	3	0.4	696	100.0	
5.1	39,586	3.8	10,861	1.0	37,405	3.6	1,046,990	100.0	

*Hospitals and clinics; total estimated by CDC

Percentage distribution of abortions by single weeks of gestation reported by

TABLE 10. Reported legal abortions, by weeks of gestation and

State	<8		9-10		11-12		13-1
	No.	%	No.	%	No.	%	No.
AR	3,872	59.3	1,383	21.2	561	8.6	324
AZ [†]	5,805	42.5	4,079	29.9	1,894	13.9	1,072
CA [§]	80,833	38.6	57,555	27.5	30,385	14.5	16,614
CO	6,350	37.8	5,687	33.9	2,549	15.2	1,147
CT [†]	8,830	47.3	5,952	31.9	2,224	11.9	443
DC	12,616	55.2	4,662	20.4	2,336	10.2	1,403
GA	13,673	39.6	9,425	27.3	5,739	16.6	2,628
HI	3,097	51.3	1,612	26.7	688	11.4	350
ID	1,154	47.0	670	27.3	476	19.4	118
IL ^{†,‡}	33,463	51.1	18,801	28.7	8,811	13.5	1,978
IN [†]	9,175	66.0	3,104	22.3	1,245	9.0	46
KS [†]	2,840	33.2	2,271	26.6	1,624	19.0	617
LA	9,183	47.2	4,456	22.9	1,919	9.9	1,267
MD	13,597	52.8	7,056	27.4	3,282	12.8	834
ME [†]	2,134	55.6	992	25.9	474	12.4	146
MI	17,015	42.0	10,584 [§]	26.1	4,995 [§]	12.3	3,270 [§]
MN	7,645	46.5	4,383	26.7	2,191	13.3	1,092
MO	7,686	40.0	5,909	30.8	3,192	16.6	1,425
MS	2,101	46.1	1,346	29.5	718	15.7	249
MT	1,326	32.7	1,443	35.5	797	19.6	264
NC	13,879	42.1	8,865	26.9	4,915	14.9	2,906
ND	1,704	56.3	866	28.6	316	10.4	107
NJ	12,777	51.7	5,785	23.4	2,422	9.8	1,587
NM	2,291	44.2	1,482	28.6	696	13.4	392
NV	4,050	66.8	1,059	17.5	490	8.1	300
NY	79,044	51.1	38,405	24.8	17,674	11.4	8,020
(City)	52,290	52.1	23,605	23.5	10,913	10.9	5,558
(Upstate)	26,754	49.2	14,800	27.2	6,761	12.4	2,462
OH	25,106	56.2	4,652	10.4	1,494	3.3	641
OK	4,981	42.4	3,546	30.2	2,043	17.4	605
OR	5,701	47.3	3,507 [§]	29.1	1,654 [§]	13.7	633 [§]
PA	35,815	60.4	14,020	23.6	4,772	8.0	2,445
RI	3,335	47.8	2,156	30.9	852	12.2	383
SC [†]	7,309	60.1	3,137	25.8	1,230	10.1	363

and state of occurrence, selected states*, 1983

13-15		16-20		>21		Unknown		Total	
No.	%	No.	%	No.	%	No.	%	No.	%
4	5.0	217	3.3	107	1.6	68	1.0	6,532	100.0
2	7.8	624	4.6	16	0.1	174	1.3	13,664	100.0
4	7.9	11,285	5.4	2,163	1.0	10,646	5.1	209,481	100.0
7	6.8	857	5.1	140	0.8	63	0.4	16,793	100.0
3	2.4	112	0.6	9	0.0	1,083	5.8	18,653	100.0
3	6.1	785 ^j	3.4	240 ^j	1.0	823	3.6	22,867	100.0
8	7.6	1,479	4.3	658	1.9	912	2.6	34,514	100.0
0	5.8	251	4.2	27	0.4	16	0.3	6,041	100.0
8	4.8	8	0.3	1	0.0	29	1.2	2,456	100.0
8	3.0	855	1.3	22	0.0	1,504	2.3	65,434	100.0
6	0.3	41	0.3	2	0.0	285	2.1	13,898	100.0
7	7.2	536	6.3	560	6.6	99	1.2	8,547	100.0
7	6.5	695	3.6	5	0.0	1,910	9.8	19,435	100.0
4	3.2	926	3.6	36	0.1	1	0.0	25,732	100.0
6	3.8	64	1.7	1	0.0	25	0.7	3,836	100.0
70 ^j	8.1	2,008 ^j	5.0	676	1.7	1,980	4.9	40,528	100.0
22	6.6	900	5.5	217	1.3	0	0.0	16,428	100.0
25	7.4	495	2.6	57	0.3	435	2.3	19,199	100.0
9	5.5	30	0.7	7	0.2	109	2.4	4,560	100.0
4	6.5	52	1.3	6	0.1	173	4.3	4,061	100.0
36	8.8	1,160	3.5	142	0.4	1,085	3.3	32,952	100.0
7	3.5	27	0.9	0	0.0	8	0.3	3,028	100.0
7	6.4	1,955	7.9	196	0.8	0	0.0	24,722	100.0
32	7.6	301	5.8	13	0.3	7	0.1	5,182	100.0
00	4.9	138	2.3	12	0.2	13	0.2	6,062	100.0
20	5.2	6,983	4.5	2,871	1.9	1,715	1.1	154,712	100.0
58	5.5	5,291	5.3	2,366	2.4	329	0.3	100,322	100.0
82	4.5	1,692	3.1	505	0.9	1,386	2.5	54,390	100.0
41	1.4	406 ^j	0.9	666 ^j	1.5	11,742	26.3	44,709	100.0
05	5.1	89	0.8	29	0.2	466	4.0	11,759	100.0
33 ^j	5.2	415 ^j	3.4	91	0.8	63	0.5	12,064	100.0
45	4.1	1,996	3.4	44	0.1	196	0.3	59,288	100.0
83	5.5	242	3.5	0	0.0	16	0.2	6,984	100.0
63	3.0	89	0.7	2	0.0	34	0.3	12,164	100.0

TABLE 10. Reported legal abortions, by weeks of gestation and s

State	<8		9-10		11-12		13-15
	No.	%	No.	%	No.	%	No.
TN	8,247	39.8	6,665	32.2	3,960	19.1	1,167
UT**	1,571	44.7	1,145	32.6	455	12.9	202
VA†	18,953	60.5	8,011	25.6	2,751	8.8	366
VT	2,100	62.6	809	24.1	328	9.8	103
WA†	16,460	59.1	6,483	23.3	2,733	9.8	1,117
WY†	452	63.6	214	30.1	40	5.6	2
TOTAL	486,170	48.0	262,177	25.9	124,927	12.3	56,626

* All states for which data are available (37) and the District of Columbia

† Weeks of gestation is physician's estimate.

‡ Distribution based on data from state health department survey of hospitals

§ Reallocation of reported abortions into comparable categories based on percentages for 31 states

† Annual data are based on 9½ months of reported data from the state health department

**Residents only

and state of occurrence, selected states*, 1983 — Continued

13-15		16-20		>21		Unknown		Total	
	%	No.	%	No.	%	No.	%	No.	%
7	5.6	209	1.0	85	0.4	393	1.9	20,726	100.0
2	5.7	96	2.7	0	0.0	48	1.4	3,517	100.0
3	1.2	835	2.7	115	0.4	308	1.0	31,339	100.0
3	3.1	13	0.4	0	0.0	2	0.1	3,355	100.0
7	4.0	912	3.3	120	0.4	31	0.1	27,856	100.0
2	0.3	1	0.1	0	0.0	2	0.3	711	100.0
3	5.6	38,087	3.6	9,338	0.9	36,464	3.6	1,013,789	100.0

hospitals and clinics; total estimated by CDC

percentage distribution of abortions by single weeks of gestation reported by

health department.

TABLE 11. Reported legal abortions by type of procedure and

State	Suction curettage		Sharp curettage		Intrauterine saline instillation		Intrauterine prostaglandin instillation	
	No.	%	No.	%	No.	%	No.	%
AR	5,888	86.9	154	2.3	2	0.0	188	
AZ	11,916	95.0	17	0.1	—	—	1	
CA ^b	177,422 ^d	85.7	24,607	11.9	2,110	1.0	1,022	
CO	15,575	93.3	63	0.4	37	0.2	624	
CT	17,865 ^e	96.8	10	0.1	137 ^g	0.7	— ^g	
DC	21,153	87.4	2,572	10.6	348	1.4	0	
GA	28,787	86.7	2,144	6.5	2,043	6.2	95	
HI	5,761	92.6	7	0.1	4	0.1	123	
ID	2,417	99.4	7	0.3	3	0.1	1	
IL	64,374	96.6	87	0.1	3	0.0	530	
IN	14,869	94.1	129	0.8	3	0.0	0	
KS	8,885	89.1	80	0.8	5	0.1	64	
LA	19,081	96.4	41	0.2	0	0.0	1	
MD	24,911	95.5	188	0.7	267	1.0	76	
ME ^{††}	2,758	70.4	1,085	27.7	11	0.3	21	
MI	40,990	94.2	169	0.4	2,194	5.0	153	
MN	15,493	87.2	3	0.0	— ^g	—	— ^g	
MO	18,136	94.3	25	0.1	1	0.0	5	
MS	5,098	99.1	10	0.2	1	0.0	8	
MT	4,075	97.6	7	0.2	1	0.0	60	
NC	30,144	94.8	182	0.6	515	1.6	488	
ND	3,052	99.2	0	0.0	0	0.0	0	
NE ^{††}	5,689	99.6	18	0.3	0	0.0	1	
NJ	14,744	48.7	13,940	46.1	1,283	4.2	64	
NM	4,919	94.4	12	0.2	6	0.1	0	
NV	6,751	99.4	2	0.0	4	0.1	1	
NY	143,885	87.3	6,601	4.0	9,607	5.8	1,234	
(City)	91,338	86.6	3,711	3.5	7,358	7.0	875	
(Upstate)	52,547	88.7	2,890	4.9	2,249	3.8	359	
OH ^{††}	49,154	87.9	5,910	10.6	185	0.3	0	
OK	11,347	91.3	1,045	8.4	1	0.0	3	
OR	12,309	96.1	131	1.0	6	0.0	224	

and state of occurrence, selected states*, 1982

State	uterine glandin dilation	Hysterotomy/ hysterectomy		Other†		Unknown		Total	
		No.	%	No.	%	No.	%	No.	%
8	2.8	11	0.2	155	2.3	381	5.6	6,779	100.0
1	0.0	2	0.0	168	1.3	435	3.5	12,539	100.0
2	0.5	169	0.1	—	—	1,769	0.9	207,099	100.0
4	3.7	11	0.1	365	2.2	10	0.1	16,685	100.0
**	—	1	0.0	52	0.3	384	2.1	18,449	100.0
0	0.0	1	0.0	16	0.1	117	0.5	24,207	100.0
5	0.3	41	0.1	97	0.3	6	0.0	33,213	100.0
3	2.0	0	0.0	324	5.2	5	0.1	6,224	100.0
1	0.0	3	0.1	0	0.0	0	0.0	2,431	100.0
0	0.8	14	0.0	389	0.6	1,216	1.8	66,613	100.0
0	0.0	7	0.0	250	1.6	548	3.5	15,806	100.0
4	0.6	7	0.1	925	9.3	10	0.1	9,976	100.0
1	0.0	5	0.0	527	2.7	139	0.7	19,794	100.0
6	0.3	6	0.0	636	2.4	0	0.0	26,084	100.0
1	0.5	6	0.2	35	0.9	0	0.0	3,916	100.0
3	0.4	6	0.0	0	0.0	0	0.0	43,512	100.0
%	—	—	—	2,262 ⁹⁵	2.7	0	0.0	17,758	100.0
5	0.0	2	0.0	976	5.1	81	0.4	19,226	100.0
8	0.2	21	0.4	7	0.1	0	0.0	5,145	100.0
0	1.4	1	0.0	31	0.7	0	0.0	4,175	100.0
8	1.5	44	0.1	21	0.1	404	1.3	31,798	100.0
0	0.0	0	0.0	0	0.0	24	0.8	3,076	100.0
1	0.0	1	0.0	0	0.0	4	0.1	5,713	100.0
4	0.2	10	0.0	7	0.0	221	0.7	30,269	100.0
0	0.0	1	0.0	230	4.4	45	0.9	5,213	100.0
1	0.0	0	0.0	0	0.0	36	0.5	6,794	100.0
4	0.7	31	0.0	2,188	1.3	1,187	0.7	164,733	100.0
5	0.8	12	0.0	1,877	1.8	295	0.3	105,466	100.0
9	0.6	19	0.0	311	0.5	892	1.5	59,267	100.0
0	0.0	7	0.0	262	0.5	398	0.7	55,916	100.0
3	0.0	2	0.0	1	0.0	25	0.2	12,424	100.0
4	1.7	1	0.0	83	0.6	53	0.4	12,607	100.0

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TABLE 11. Reported legal abortions by type of procedure and state

State	Suction curettage		Sharp curettage		Intrauterine saline instillation		Intrauterine prostaglandin instillation		Hy hy
	No.	%	No.	%	No.	%	No.	%	
PA	57,430	94.5	1,784	2.9	1,003	1.7	194	0.3	
RI	7,552	98.0	10	0.1	131	1.7	0	0.0	
SC	12,417	98.4	47	0.4	20	0.2	67	0.5	
TN	20,521	99.0	37	0.2	0	0.0	156	0.8	
UT [¶]	3,736	99.8	3	0.1	0	0.0	0	0.0	
VA	30,848	96.8	111	0.3	351	1.1	126	0.4	
VT	3,483	99.6	5	0.1	1	0.0	9	0.3	
WA	28,665	97.8	25	0.1	449	1.5	147	0.5	
WY	687	98.4	3	0.4	0	0.0	0	0.0	
TOTAL	952,787	89.9	61,271	5.8	20,732	2.0	5,686	0.5	4

* All states for which data are available (38) and the District of Columbia

† Includes instillation procedures not reported as a specific category, and procedures

§ Distribution based on data from state health department survey of hospitals and

|| Reported as suction curettage and other

¶ Includes abortions done by both suction and sharp curettage

** Intrauterine prostaglandin instillation included with intrauterine saline instillation

†† Does not add to total abortions because of some reported combination procedures

§§ Instillation procedures, hysterotomy, and hysterectomy are reported as "other."

|| Residents only

— Not reported

Rate of occurrence, selected states*, 1982 — Continued

Hysterotomy/ hysterectomy		Other†		Unknown		Total	
No.	%	No.	%	No.	%	No.	%
10	0.0	331	0.5	20	0.0	60,772	100.0
0	0.0	1	0.0	9	0.1	7,703	100.0
14	0.1	51	0.4	0	0.0	12,616	100.0
15	0.1	0	0.0	0	0.0	20,729	100.0
0	0.0	0	0.0	5	0.1	3,744	100.0
19	0.1	102	0.3	312	1.0	31,869	100.0
0	0.0	0	0.0	0	0.0	3,498	100.0
5	0.0	4	0.0	3	0.0	29,298	100.0
0	0.0	0	0.0	8	1.1	698	100.0
474	0.0	10,496	1.0	7,855	0.7	1,059,301	100.0

Procedures reported as "other" (see footnote**)
Hospitals and clinics; total estimated by CDC

ation
Procedures.
ther."

TABLE 12. Reported legal abortions by type of procedure and

State	Suction curettage		Sharp curettage		Intrauterine saline instillation		Intrauterine prostaglandin instillation	
	No.	%	No.	%	No.	%	No.	%
AR	5,976	91.5	46	0.7	1	0.0	147	
AZ	13,352	97.7	13	0.1	—	—	1	
CA ^b	177,119 ^d	84.6	29,320	14.0	1,263	0.6	700	
CO	15,613	93.0	50	0.3	18	0.1	743	
CT	18,348 ^f	98.4	14	0.1	74**	0.4	—**	
DC	19,450	85.1	2,672	11.7	624	2.7	—	
GA	30,301	87.8	2,464	7.1	1,546	4.5	67	
HI	5,713	94.6	11	0.2	1	0.0	83	
ID	2,450	99.8	4	0.2	2	0.1	0	
IL ^{††}	63,514	97.1	166	0.3	10	0.0	360	
IN	13,226	95.2	47	0.3	1	0.0	0	
KS	7,915	92.6	73	0.9	7	0.1	28	
LA	17,935	92.3	42	0.2	—	—	—	
MD	24,637	95.7	145	0.6	216	0.8	94	
ME	3,737	97.4	57	1.5	4	0.1	8	
MI	36,357	94.6	258	0.6	1,828	4.5	82	
MN	14,348	87.3	3	0.0	— ^{§§}	— ^{§§}	— ^{§§}	
MO	18,085	94.2	16	0.1	0	0.0	3	
MS	4,523	99.2	8	0.2	0	0.0	6	
MT	3,963	97.6	8	0.2	1	0.0	51	
NC	30,303	92.0	448	1.4	559	1.7	438	
ND	3,024	99.9	—	—	—	—	—	
NE	5,592	99.1	21	0.4	1	0.0	1	
NJ	13,644	55.2	9,930	40.2	989	4.0	53	
NM	4,867	93.9	10	0.2	5	0.1	—	
NV	6,040	99.6	0	0.0	1	0.0	0	
NY	136,655	88.3	5,879	3.8	7,591	4.9	1,020	
(City)	88,150	87.9	3,248	3.2	5,884	5.9	712	
(Upstate)	48,505	89.2	2,631	4.8	1,707	3.1	308	
OH	42,036	92.3	3,394	7.4	33	0.1	—	
OK	10,554	89.8	1,120	9.5	60	0.5	1	
OR	10,700	88.7	96	0.8	1	0.0	33	

and state of occurrence, selected states*, 1983

uterine glandin ilation	Hysterotomy/ hysterectomy		Other†		Unknown		Total	
%	No.	%	No.	%	No.	%	No.	%
2.3	17	0.3	169	2.6	176	2.7	6,532	100.0
0.0	—	—	—	—	298	2.2	13,664	100.0
0.3	45	0.0	—	—	1,034	0.5	209,481	100.0
4.4	10	0.1	350	2.1	9	0.1	16,793	100.0
—	1	0.0	35	0.2	181	1.0	18,653	100.0
—	—	—	12	0.1	109	0.5	22,867	100.0
0.2	37	0.1	89	0.3	10	0.0	34,514	100.0
1.4	1	0.0	231	3.8	1	0.0	6,041	100.0
0.0	0	0.0	0	0.0	0	0.0	2,456	100.0
0.6	14	0.0	279	0.4	1,091	1.7	85,434	100.0
0.0	2	0.0	242	1.7	380	2.7	13,898	100.0
0.3	6	0.1	497	5.8	21	0.2	8,547	100.0
—	3	0.0	1,097	5.6	358	1.8	19,435	100.0
0.4	8	0.0	632	2.5	0	0.0	25,732	100.0
0.2	2	0.1	28	0.7	0	0.0	3,836	100.0
0.2	1	0.0	2	0.0	0	0.0	40,528	100.0
—	—	—	2,077 ^{§§}	12.6	0	0.0	16,428	100.0
0.0	2	0.0	999	5.2	94	0.5	19,199	100.0
0.1	15	0.3	7	0.2	1	0.0	4,560	100.0
1.3	3	0.1	35	0.9	0	0.0	4,061	100.0
1.3	43	0.1	12	0.0	1,149	3.5	32,952	100.0
—	—	—	—	—	4	0.1	3,028	100.0
0.0	2	0.0	23	0.4	3	0.1	5,643	100.0
0.2	11	0.0	15	0.1	80	0.3	24,722	100.0
—	—	—	275	5.3	25	0.5	5,182	100.0
0.0	0	0.0	0	0.0	21	0.3	6,062	100.0
0.0	0	0.0	2,394	1.5	1,137	0.7	154,712	100.0
0.7	17	0.0	2,085	2.1	226	0.2	100,322	100.0
0.6	19	0.0	309	0.6	911	1.7	54,390	100.0
—	—	—	97	0.2	6	0.0	45,566	100.0
0.0	10	0.1	0	0.0	14	0.1	11,759	100.0
0.3	2	0.0	1,224	10.1	8	0.1	12,084	100.0

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TABLE 12. Reported legal abortions by type of procedure and s

State	Suction curettage		Sharp curettage		Intrauterine saline instillation		Intrauterine prostaglandin instillation	
	No.	%	No.	%	No.	%	No.	%
PA	58,517	95.3	1,387	2.3	918	1.5	130	0.2
RI	6,862	98.3	12	0.2	91	1.3	0	0.0
SC	11,949	98.2	45	0.4	18	0.1	70	0.6
TN	20,620	99.5	31	0.1	0	0.0	64	0.3
UT††	3,508	99.7	1	0.0	1	0.0	—	—
VA	30,622	97.7	59	0.2	276	0.9	139	0.5
VT	3,336	99.4	3	0.1	0	0.0	8	0.0
WA	27,338	98.1	26	0.1	328	1.2	155	0.6
WY	704	99.0	1	0.1	—	—	1	0.0
TOTAL	923,433	90.5	57,980	5.7	16,468	1.6	4,486	0.4

* All states for which data are available (37) and the District of Columbia.

† Includes instillation procedures not reported as a specific category, and p

§ Distribution based on data from state health department survey of hospit

|| Reported as suction curettage and other

¶ Includes abortions done by both suction and sharp curettage

** Intrauterine prostaglandin instillation included with intrauterine saline inst

†† Annual data are based on 9½ months of reported data from state health

§§ Instillation procedures, hysterotomy and hysterectomy are reported as "o

||| Does not add to total abortions because of some reported combination p

†† Residents only

— Not reported

and state of occurrence, selected states*, 1983 — Continued

uterine cancer incidence	Hysterotomy/ hysterectomy		Other†		Unknown		Total	
	%	No.	%	No.	%	No.	%	No.
0.2	20	0.0	189	0.3	127	0.2	59,288	100.0
0.0	0	0.0	11	0.2	8	0.1	6,984	100.0
0.6	16	0.1	60	0.5	6	0.0	12,164	100.0
0.3	11	0.1	0	0.0	0	0.0	20,726	100.0
—	—	—	1	0.0	6	0.2	3,517	100.0
0.4	26	0.1	58	0.2	159	0.5	31,339	100.0
0.2	0	0.0	0	0.0	8	0.2	3,355	100.0
0.6	6	0.0	3	0.0	0	0.0	27,856	100.0
0.1	2	0.3	—	—	3	0.4	711	100.0
0.4	352	0.0	11,143	1.1	6,527	0.6	1,020,289	100.0

bia
and procedures reported as "other" (see footnote **)
hospitals and clinics; total estimated by CDC

instillation
health department.
as "other."
ion procedures.

Approximately three-fourths of the women obtaining abortions in 1982 and 1983 were unmarried. The abortion ratio was more than 14 times higher for unmarried women than for married women: 1,379 versus 97 abortions/1,000 live births in 1982 and 1,308 versus 90/1,000 live births in 1983 (Table 14).

In both years, more than half of the women obtaining abortions had had no live births (Table 15). Furthermore, about 90% of the women obtaining abortions had had two or fewer live births. The abortion ratio was highest for women with no live births and lowest for women with one live birth.

Approximately 60% of the women obtaining abortions in 1982 and 1983 had the procedure for the first time (Table 16). In both years, however, more than 10% of the women obtaining abortions had had at least two previous abortions.

In 1982 and 1983, 32 states and 31 states, respectively, reported legal abortions by race and age group, and information on marital status was provided by 30 states (Tables 17 and 18). In both years, the percentage of women obtaining abortions who were ≤ 19 years of age was higher for whites than for black and other races. For both racial groups, approximately three-fourths of women obtaining abortions in 1982 and 1983 were unmarried.

TABLE 13. Percentage distribution and abortion ratios, by race, 1982 and 1983

Year	Race			Total
	White	Black/Other	Unknown	
% Distribution*				
1982	65.7	30.2	4.1	100.0
1983	64.9	31.1	4.0	100.0
Abortion ratios†				
1982	309	523		357
1983	302	497		348

*1982 based on 718,153 abortions from 34 states; 1983 based on 686,819 abortions from 34 states

†Calculated as the number of legal abortions obtained by women of a given race per 1,000 live births to women of the same race

TABLE 14. Percentage distribution and abortion ratios, by marital status, 1982 and 1983

Year	Marital status			Total
	Married	Unmarried	Unknown	
% Distribution*				
1982	20.5	72.6	7.0	100.0
1983	19.8	73.0	7.1	100.0
Abortion ratios†				
1982	97	1,379		358
1983	90	1,308		347

*1982 based on 936,127 abortions from 34 states; 1983 based on 906,413 abortions from 35 states

†Calculated as the number of legal abortions obtained by women of a given marital status per 1,000 live births to women of the same marital status

TABLE 15. Percentage distribution and abortion ratios, by number of live births, 1982 and 1983

Year	Live births					Unknown	Total
	0	1	2	3	≥4		
% Distribution ^a							
1982	56.2	19.7	13.5	5.0	2.8	2.8	100.0
1983	55.2	20.1	13.8	5.0	2.7	3.2	100.0
Abortion ratios [†]							
1982	474	214	306	294	231		342
1983	455	212	304	289	219		332

*1982 based on 715,635 abortions from 34 states; 1983 based on 683,270 abortions from 34 states

†Calculated as the number of legal abortions obtained by women with a particular number of live births per 1,000 live births to women with the same number of live births

TABLE 16. Percentage distribution of reported legal abortions, by number of previous induced abortions, 1982 and 1983

Year	Previous induced abortions				Unknown	Total
	0	1	2	≥3		
	% Distribution*					
1982	61.0	23.8	7.8	3.1	4.3	100.0
1983	60.2	24.2	8.7	3.5	3.4	100.0

*1982 based on 739,842 abortions from 35 states; 1983 based on 706,137 abortions from 35 states

TABLE 17. Number and percentage of reported legal abortions, by race, age group, and marital status, 1982

Age group (years)	Race				Total	
	White		Black/Other		No.	%
	No.	%	No.	%		
<15	2,791	0.6	3,128	1.6	5,919	0.9
15-19	124,541	27.5	45,652	23.1	170,193	26.2
20-24	160,568	35.5	66,806	33.8	227,374	35.0
25-29	89,359	19.7	44,693	22.6	134,052	20.6
30-34	46,478	10.3	23,970	12.1	70,448	10.8
35-39	21,838	4.8	10,274	5.2	32,112	4.9
≥40	6,882	1.5	3,061	1.5	9,943	1.5
TOTAL (32 states)	452,457	100.0	197,584	100.0	650,041	100.0
Marital status						
Married	94,955	22.5	41,485	21.7	136,440	21.4
Unmarried	327,353	77.5	149,550	78.3	476,903	78.6
TOTAL (30 states)	422,308	100.0	191,035	100.0	613,343	100.0

TABLE 18. Number and percentage of reported legal abortions, by race, age group, and marital status, 1983

Age group (years)	Race				Total	
	White		Black/Other			
	No.	%	No.	%	No.	%
<15	2,808	0.7	3,505	1.8	6,313	1.0
15-19	111,479	27.2	45,346	23.5	156,825	26.0
20-24	143,635	35.1	64,991	33.7	208,626	34.6
25-29	81,588	19.9	43,504	22.6	125,092	20.8
30-34	42,682	10.4	22,881	11.9	65,563	10.9
35-39	20,806	5.1	9,743	5.1	30,549	5.1
≥40	6,341	1.5	2,821	1.5	9,162	1.5
TOTAL (31 states)	409,339	100.0	192,791	100.0	602,130	100.0
Marital status						
Married	86,610	21.8	37,819	20.1	124,429	21.2
Unmarried	310,578	78.2	150,675	79.9	461,253	78.8
TOTAL (30 states)	397,188	100.0	188,494	100.0	585,682	100.0

More than 99% of abortions performed at ≤12 weeks of gestation were done by curettage (Tables 19 and 20). The most common procedure used at ≥13 weeks of gestation was dilatation and evacuation (D&E). Most intrauterine instillations were saline and were done at ≥16 weeks of gestation.

According to information reported to CDC, 18 women died as a result of abortion in 1982 (Table 21). Of the 18 deaths, 11 were associated with legally induced abortion, six with spontaneous abortion, and one with illegally induced abortion. Fourteen women reportedly died as a result of abortion in 1983; nine of these abortions were performed legally, four occurred spontaneously, and one was performed illegally. The death-to-case rate for legal abortion increased from 0.5/100,000 abortions in 1981 to 0.8/100,000 abortions in 1982. In 1983, the death-to-case rate was 0.7/100,000 abortions. The number of deaths and the death-to-case rate for 1983 are not final, since some deaths are still being investigated.

Discussion

From 1969 through 1982, the reported number of legal abortions in the United States increased every year (Figure 1). The largest percentage increase in the number of legal abortions occurred in the period 1969-1973. From 1976 through 1981, except for 1979, the annual percentage increase declined each year. In 1983, the reported number of legal abortions declined for the first time since abortion surveillance began in 1969.

From 1969 through 1980, the abortion ratio increased every year, but from 1980 through 1983 it declined each year (Figure 1). The abortion rate also increased every year until 1981, when it declined to 24 from 25/1,000 females ages 15-44 in 1980. The abortion rate remained at 24 in 1982 and declined again to 23/1,000 females ages 15-44 in 1983 (Figure 1).

TABLE 19. Number and percentage of reported legal abortions, by week

	Weeks					
	<8		9-10		11-12	
	No.	%	No.	%	No.	%
Type of procedure						
Suction curettage	393,776	93.9	210,135	93.4	98,754	91.6
Sharp curettage	24,003	5.7	13,823	6.1	7,639	7.1
Intrauterine saline instillation	328	0.1	423	0.2	584	0.5
Intrauterine prostaglandin instillation	54	0.0	131	0.1	203	0.2
Hysterotomy/hysterectomy	137	0.0	58	0.0	66	0.1
Other	1,259	0.3	463	0.2	573	0.5
TOTAL	419,557	100.0	225,033	100.0	107,819	100.0
(33 states)						
Age group (years)						
<15	2,278	0.6	1,803	0.9	1,219	1.2
15-19	84,397	21.5	80,153	28.6	33,257	32.8
20-24	136,698	34.8	74,811	35.6	35,803	35.3
25-29	91,079	23.2	41,340	19.7	18,081	17.8
30-34	49,772	12.7	20,254	9.6	8,215	8.1
35-39	22,499	5.7	8,954	4.3	3,594	3.5
≥40	6,498	1.7	2,826	1.3	1,256	1.2
TOTAL	393,221	100.0	210,141	100.0	101,425	100.0
(32 states)						
Race						
White	197,702	72.1	99,174	69.1	45,391	65.8
Black/other	76,342	27.9	44,256	30.9	23,582	34.2
TOTAL	274,044	100.0	143,430	100.0	68,973	100.0
(29 states)						

weeks of gestation, procedure, age group, and race, 1982

Weeks of gestation

13-15		16-20		≥21		Total	
No.	%	No.	%	No.	%	No.	%
37,953	79.8	16,357	45.6	3,505	33.5	760,480	89.9
4,602	9.7	2,510	7.0	407	3.9	52,984	6.3
2,259	4.8	10,232	28.5	4,852	46.3	18,678	2.2
700	1.5	2,826	7.9	633	6.0	4,547	0.5
37	0.1	68	0.2	11	0.1	377	0.0
1,990	4.2	3,869	10.8	1,061	10.1	9,215	1.1
47,541	100.0	35,862	100.0	10,469	100.0	846,281	100.0
743	1.7	885	2.7	325	3.3	7,253	0.9
15,109	34.9	12,985	39.2	3,784	39.0	209,685	26.5
14,994	34.6	11,026	33.2	2,993	30.8	276,325	34.9
7,397	17.1	4,758	14.3	1,251	12.9	163,906	20.7
3,205	7.4	2,108	6.4	791	8.1	84,345	10.7
1,376	3.2	1,073	3.2	410	4.2	37,906	4.8
497	1.1	328	1.0	160	1.6	11,565	1.5
43,321	100.0	33,163	100.0	9,714	100.0	790,985	100.0
16,653	63.4	11,841	57.8	3,696	64.0	374,657	69.5
9,622	36.6	8,640	42.2	2,196	36.0	164,636	30.5
26,275	100.0	20,481	100.0	6,092	100.0	539,295	100.0

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TABLE 20. Number and percentage of reported legal abortions, by

	Weeks					
	≤8		9-10		11-12	
	No.	%	No.	%	No.	%
Type of procedure						
Suction curettage	397,116	94.4	220,331	94.0	104,881	92.4
Sharp curettage	21,998	5.2	12,757	5.4	7,239	6.4
Intrauterine saline instillation	425	0.1	450	0.2	545	0.5
Intrauterine prostaglandin instillation	100	0.0	160	0.1	291	0.3
Hysterotomy/hysterectomy	94	0.0	58	0.0	41	0.0
Other	1,149	0.3	542	0.2	546	0.5
TOTAL (33 states)	420,882	100.0	234,298	100.0	113,543	100.0
Age group (years)						
<15	2,676	0.7	2,088	0.9	1,370	1.3
15-19	81,922	20.6	61,162	27.8	35,118	32.8
20-24	137,562	34.5	77,048	35.0	37,814	35.3
25-29	92,341	23.2	44,534	20.2	18,796	17.6
30-34	51,811	13.0	21,909	10.0	9,038	8.4
35-39	25,113	6.3	10,141	4.6	3,670	3.4
≥40	6,864	1.7	3,260	1.5	1,178	1.1
TOTAL (32 states)	398,289	100.0	220,142	100.0	106,984	100.0
Race						
White	208,468	71.3	106,095	67.6	48,707	64.6
Black/other	83,768	28.7	50,747	32.4	26,652	35.4
TOTAL (29 states)	252,236	100.0	156,842	100.0	75,359	100.0

, by weeks of gestation, procedure, age group, and race, 1983

Weeks of gestation									
13-15		16-20		≥21		Total			
%	No.	%	No.	%	No.	%	No.	%	
92.4	41,295	81.4	17,826	52.6	3,625	42.6	785,074	91.1	
6.4	4,829	9.5	2,479	7.3	392	4.6	49,694	5.8	
0.5	1,932	3.8	7,781	22.9	3,242	38.1	14,375	1.7	
0.3	644	1.3	2,501	7.4	361	4.2	4,057	0.5	
0.0	29	0.1	38	0.1	13	0.2	273	0.0	
0.5	1,990	3.9	3,284	9.7	879	10.3	8,390	1.0	
100.0	50,719	100.0	33,909	100.0	8,512	100.0	861,863	100.0	
1.3	871	1.9	900	2.9	247	3.1	8,152	1.0	
32.8	16,430	35.3	11,989	38.5	3,124	39.1	209,745	25.9	
35.3	15,766	33.9	10,150	32.6	2,322	29.1	280,662	34.6	
17.6	7,935	17.0	4,708	15.1	1,278	16.0	169,592	20.9	
8.4	3,567	7.7	2,103	6.8	519	6.5	88,947	11.0	
3.4	1,513	3.3	961	3.1	348	4.4	41,746	5.1	
1.1	458	1.0	314	1.0	145	1.8	12,219	1.5	
100.0	46,540	100.0	31,125	100.0	7,983	100.0	811,063	100.0	
64.6	19,007	62.7	11,869	57.6	3,385	62.6	397,531	68.4	
35.4	11,313	37.3	8,737	42.4	2,023	37.4	183,240	31.6	
100.0	30,320	100.0	20,606	100.0	5,408	100.0	580,771	100.0	



TABLE 21. Abortion-related deaths reported to CDC, by type of abortion, United States, 1972-1983*

Year	Induced		Spontaneous	Other	Unknown	Total	Death-to-case Rate [†]
	Legal	Illegal					
1972	24	39	25	0	2	90	4.1
1973	25	19	10	0	3	57	4.1
1974	26	6	21	0	1	54	3.4
1975	29	4	14	0	1	48	3.4
1976	11	2	13	0	1	27	1.1
1977	17	4	16	0	0	37	1.6
1978	9	7	9	1	0	26	0.8
1979	18	0	9	0	0	27	1.4
1980	9	1	6	0	1	17	0.7
1981	7	1	3	0	0	11	0.5
1982	11	1	6	0	0	18	0.8
1983	9	1	4	0	0	14	0.7

*Data for 1983 are not final.

[†]Legal abortion-related deaths per 100,000 legal abortions

As in previous years, the number of legal abortions reported to CDC in 1982 and 1983 was probably lower than the number actually performed. Most of the information in this report was provided by state health departments, and their totals have been consistently lower than those obtained by direct surveys. For instance, in 1982 the total number of abortions reported by CDC was 17% lower than that reported by The Alan Guttmacher Institute, which obtains information by direct surveillance (1).

In each year from 1975 through 1983, at least 89% of abortions were performed in the woman's state of residence. In addition, the number of women obtaining abortion in their state of residence increased from 89.2% in 1975 to 93.3% in 1983. Since the denominators of both the abortion rate and the abortion ratio for each state are derived from state vital statistics, they may not accurately reflect the frequency of abortions obtained by residents of the state.

In 1972, the ages of women obtaining abortions were almost evenly distributed among three age groups: ≤ 19 , 20-24, and ≥ 25 years of age. From 1972 through 1983, the percentage of women obtaining abortions in the two older age groups gradually increased, perhaps reflecting a similar shift in the ages of women in the population (2).

Between 1978 and 1983, both the race and the marital status of women obtaining abortions remained relatively constant. The percentages of women obtaining legal abortions by number of live births and by weeks of gestation also remained essentially unchanged.

Between 1974 and 1983, the number of women obtaining abortions who had had no previous abortions declined from 86.8% in 1974 to 62.4% in 1983. Among the women who had previously had one or more induced abortions, the percentages increased as follows: one abortion, from 11.3% to 25%; two abortions, from 1.5% to 9%; and three or more abortions, from 0.4% to 3.7%.

Between 1974 and 1983, the percentage of abortions performed by curettage increased from 89.7% to 96.8%, whereas the percentage of abortions performed by intrauterine instillation declined steadily from 7.8% to 2.1%. The percentage of abortions performed by hysterectomy and hysterotomy decreased from 0.6% to <0.05%.

Between 1975 and 1983, the percentage of second-trimester abortions that were performed by D&E increased from 33.4% to 75.6%, and the percentage performed by intrauterine

instillation decreased from 56.8% to 17.7%. This may be explained by the lower cost and the lower rate of complications associated with D&E (3).

After a decrease of 88% in the number of abortion-related deaths, from 90 deaths in 1972 (the year CDC's surveillance of abortion mortality began) to 11 deaths in 1981, the number increased to 18 in 1982. Abortion-related mortality data for 1983 are not final and therefore are not subject to comparisons.

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Sudden Unexplained Death Syndrome in Southeast Asian Refugees: A Review of CDC Surveillance

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Introduction

In February 1981, CDC received reports from California, Minnesota, and Oregon that a total of 12 apparently healthy young Southeast Asian (SEA) refugees had died in their sleep, and the cause of death could not be determined by postmortem examination. The deaths had occurred between July 1977 and February 1981. This syndrome is now known as sudden unexplained death syndrome (SUDS). SUDS is also known as night death; sudden unexplained nocturnal death syndrome (SUNDS); Pokkuri, in Japan; and Bangungut, in the Philippines. CDC began national surveillance for SUDS soon after receiving the case reports in 1981.

A preliminary report on the first 38 cases was published in December 1981 (1), and a detailed description of 51 cases followed in December 1983 (2). The latter report included the results of a case-control study and covered cases reported through March 30, 1982. Since then, additional cases have been reported and hypotheses have been suggested about the cause(s) of SUDS (3-5).

This report is a review of CDC's surveillance for SUDS, including all confirmed cases reported to CDC between February 1, 1981, and September 30, 1986; characteristics of these cases are summarized.

Materials and Methods

Case Definition. Until 1984, CDC defined SUDS as any unexpected death of a previously healthy SEA refugee for whom a postmortem examination did not disclose the cause of death (2). From 1984 to the present, CDC has used the following case definition: a) the deceased must have been at least 2 years of age, b) the deceased must have been born in or have had at least one parent born in Vietnam, Cambodia (Kampuchea), Laos, Thailand, the Philippines, or some other SEA country, and c) postmortem examination must not have revealed an underlying cause of death. The definition of a probable case is the same as the above, with one exception: the underlying cause of death is unknown, but the results of the postmortem examination are not available. Although the current SUDS case definition includes the sudden deaths of SEA refugees and of persons born in the United States who had at least one parent who was born in Southeast Asia, this report includes only deaths among SEA refugees.

Source of Case Reports. This report is based on case reports received and compiled at CDC by the Epidemiology Program Office (1981-1983) and the Center for Environmental Health (CEH) (1984-1986). Case reports were received from state and local health departments, coroners, and medical examiners. In March 1981, the Epidemiology Program Office began active case ascertainment, including widespread media coverage, and continued it through April 1983. Details of this surveillance have been described elsewhere (2).

Between May 1983 and July 1984, CDC did not actively solicit SUDS case reports from health agencies, medical examiners, and coroners. In August 1984, CEH began receiving case reports, and on February 1, 1986, with the support of the Office of Refugee Resettlement (ORR), CEH — in cooperation with the Public Health Foundation (PHF) — solicited case reports from health departments in the 50 states, the District of Columbia, and the six U.S. territories, and from about 3,000 medical examiners and coroners nationwide.

To facilitate case reporting, PHF asked each state health department to identify a coordinator to assist medical examiners and coroners in reporting cases. In addition, PHF mailed to the 3,000 medical examiners and coroners information describing the surveillance system, a copy of two articles on SUDS (1,2), and a case report form. Through this mailing, PHF solicited reports of new cases and of past cases that had occurred between January 1983 and February 1986.

For each death, PHF and CDC requested that a standard report form be used to record events immediately preceding death and that a death certificate, the medical examiner's or coroner's investigative report (if available), and an autopsy report — including the findings of external, internal, and microscopic examinations and the results of toxicologic testing — be sent. Information about the death — the place, time, and cause — and the country of birth were abstracted from death certificates, autopsy reports, investigative reports, and questionnaires used in the CDC case-control study (2).

Refugee Population Estimates. The refugee population estimates in this report are based on data obtained from ORR's Refugee Resettlement Program (6). Program personnel collect information on all refugee arrivals in the United States. For SEA refugees who arrived in the United States in the period 1975-1985, aggregate data were obtained on year of arrival, year of birth, sex, and country of origin (Vietnam, Laos, or Cambodia). Complete data are not yet available for 1986. Information was not available on the sex of most SEA refugees entering the United States from 1976 through 1978; therefore, the numbers of males and females for these years were estimated on the basis of the sex distribution of refugees entering the United States from 1979 through 1985.

For most SEAs, no information was available on the month of arrival in the United States; therefore, crude death rates were calculated by using an estimate of the mid-year SEA refugee population. The mid-year population was estimated to be the total number of refugees entering the United States in previous years and half the number entering in a given year (7). Since reliable nationwide estimates were not available, no adjustment was made for births or deaths that occurred after the refugees arrived in the United States.

Estimates were obtained from ORR's Refugee Resettlement Program on the number of SEA refugees in each state (6). These estimates are based on the number of refugees settled in each state upon entering the United States and on later migration within the United States. Estimates of secondary migration are important, since many SEA refugees leave the states in which they first settle and move to other states. Before 1981, ORR could track secondary migration by using yearly alien registration data from the Immigration and Naturalization Service. Since the registration program was discontinued in 1981, ORR has estimated secondary migration by tracking persons who have moved from one state to another and who have received assistance or services in publicly supported programs in both states. Data obtained from public assistance programs are used to adjust the number of known resettlements for each year and the January 1981 baseline figures for each state (6).

Ethnicity and Country of Origin. As of September 30, 1986, a total of 811,048 SEA refugees had settled in the United States through the Indochinese Refugee Program (8). Yearly and cumulative totals are shown in Figures 1-4. Figure 1 shows the number of refugees

from all SEA countries combined, and Figures 2-4 show the number from Vietnam, Laos, and Cambodia, respectively. The migration patterns differ slightly by country of origin. After a large influx in 1975, the number of refugees arriving from Vietnam dropped to low levels for 1976 and 1977, rose to a peak in 1980, and then declined over the next 3 years to a level of about 30,000 per year (Figure 2). Refugees arriving from Laos followed the same general pattern, although the initial influx was smaller (Figure 3). The number of refugees from Cambodia peaked in 1981, and since then Cambodian refugees have continued to arrive at a fairly constant level of about 15,000-20,000 per year (Figure 4).

Less information is available on the ethnicity of SEA refugees; they represent a complex mixture of ethnic groups. The largest number of refugees arriving in the United States have been Vietnamese (510,373), followed by Cambodian (138,448), lowland Lao (101,874), and highland Lao (60,353) (8). In the absence of data on ethnic groups by year of arrival, the country of origin was used in the calculation of rates.

FIGURE 1. Refugees arriving from Southeast Asia, by year, United States, 1975-1985

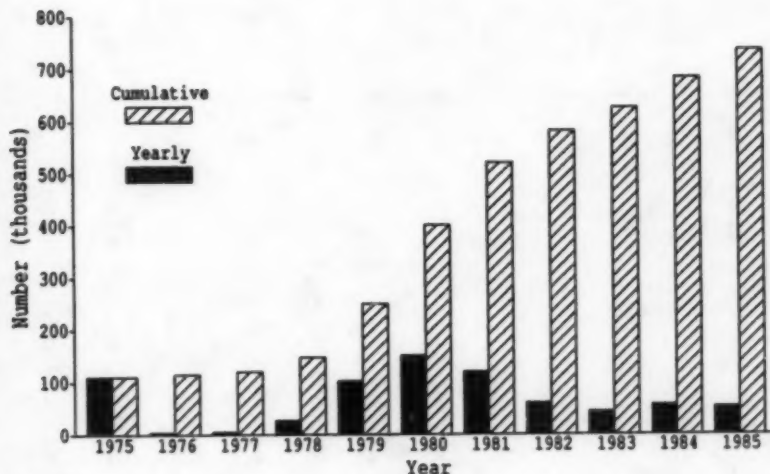


FIGURE 2. Refugees arriving from Vietnam, by year, United States, 1975-1985

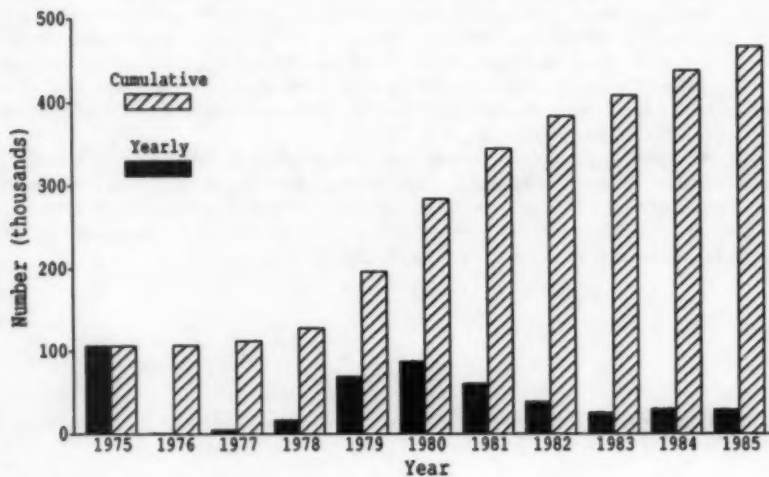


FIGURE 3. Refugees arriving from Laos, by year, United States, 1975-1985

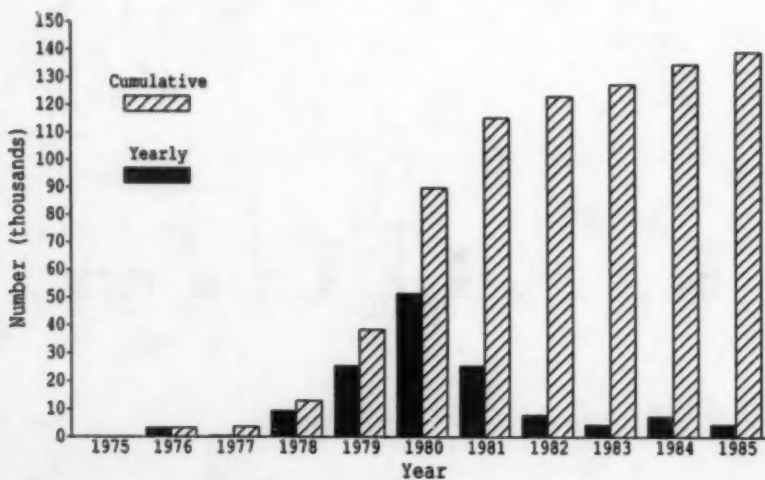
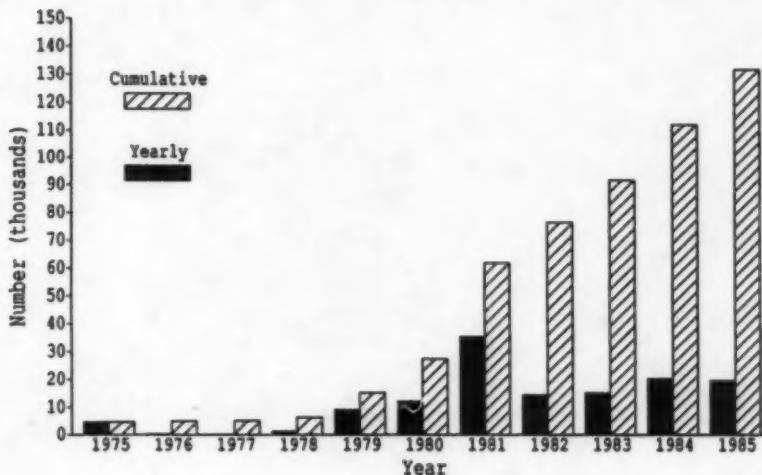


FIGURE 4. Refugees arriving from Cambodia, by year, United States, 1975-1985



Results

Between February 1, 1981, and September 30, 1986, CDC received reports of 142 sudden unexplained deaths among SEAs. For 121 of the deaths, CDC received enough information to classify them as a case, a probable case, or not a SUDS case. Of these 121 reported deaths, 116 (96%) met the CDC SUDS case definition, four (3%) were classified as probable SUDS cases, and one (1%) was classified as not a SUDS case. CDC is now obtaining additional information on the other 21 deaths so that they may be classified.

Of the 116 confirmed cases, 104 are included in this report. Twelve of the deceased persons were excluded because they were not SEA refugees, and insufficient information on the population concerned precluded the calculation of death rates for them. Two of these 12 persons were of Asian heritage who were born in the United States; the other 10 were SEAs who had immigrated to Guam from the Philippines (nine) or from the island of Yap (one). Of the nine Guam immigrants from the Philippines, three died in 1972, one in 1973, two in 1974, one in 1976, one in 1978, and one in 1985. The immigrant from Yap died in 1978.

Cases and Rates. The number of deaths among all SEA refugees peaked in 1981, with 26 deaths, and has declined every year since then to seven deaths in 1985 (Figure 5). As of September 30, 1986, CDC had received reports of six confirmed cases in 1986. The number of deaths peaked in 1981 for Laotians (21 deaths; Figure 6), but did not peak until 1982 for Vietnamese (five deaths; Figure 7), and until 1983 for Cambodians (six deaths; Figure 8).

The crude death rate for SUDS among SEA males was 10.2 per 100,000 in 1981; by 1985 it had declined to 1.8 (Figure 9). The 1985 rate does not include nine reported deaths that cannot be classified until more information is obtained. If all nine deaths awaiting classification meet the case definition for SUDS, the 1985 rate would be 4.1 deaths per 100,000 population.

FIGURE 5. Sudden unexplained deaths among Southeast Asian refugees, by year, United States, January 1975 - September 1986

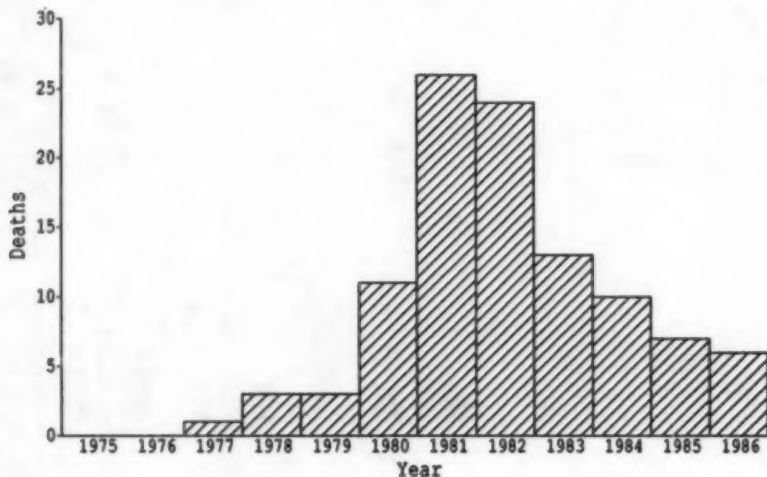


FIGURE 6. Sudden unexplained deaths among Laotian refugees, by year, United States, January 1975 - September 1986

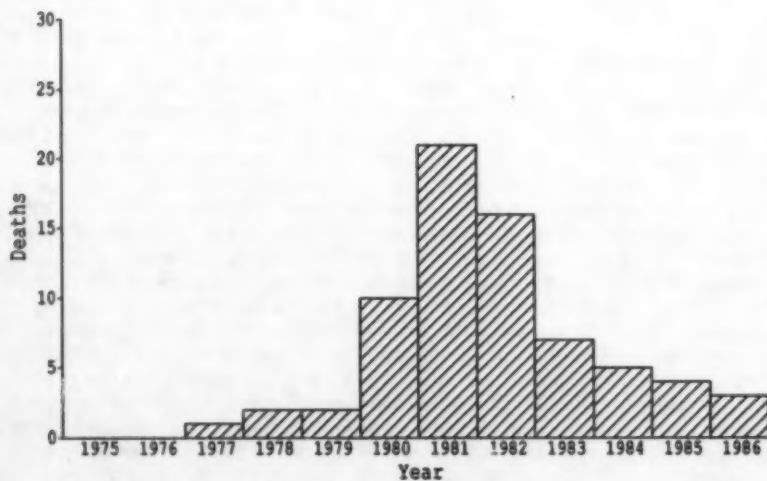


FIGURE 7. Sudden unexplained deaths among Vietnamese refugees, by year, United States, January 1975 - September 1986

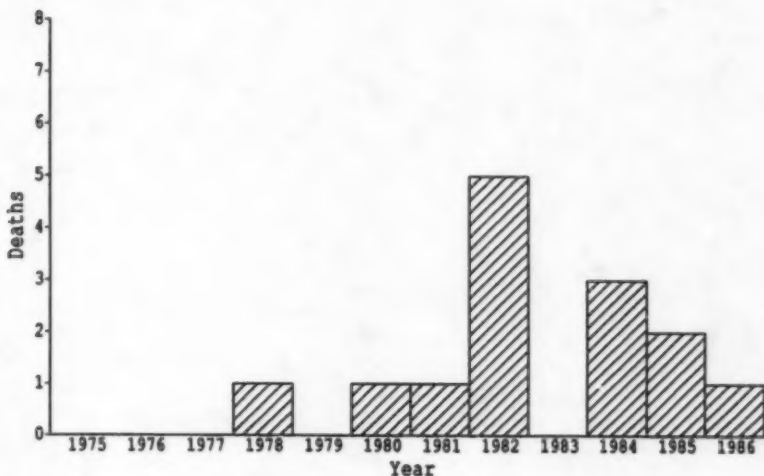


FIGURE 8. Sudden unexplained deaths among Cambodian refugees, by year, United States, January 1975 - September 1986

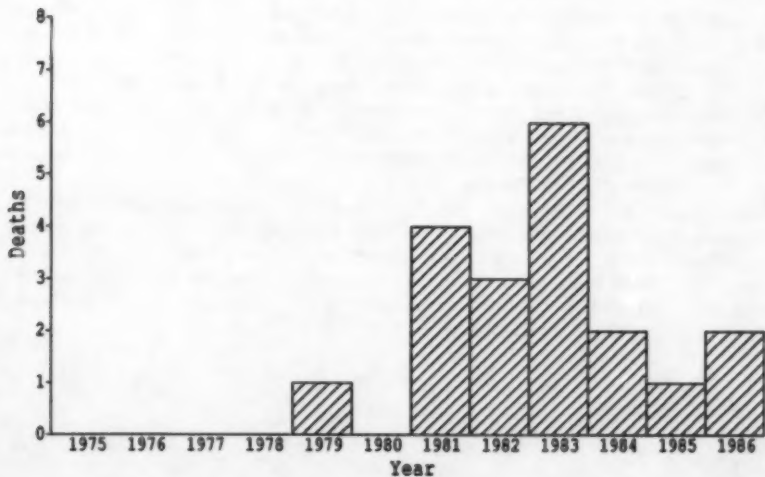
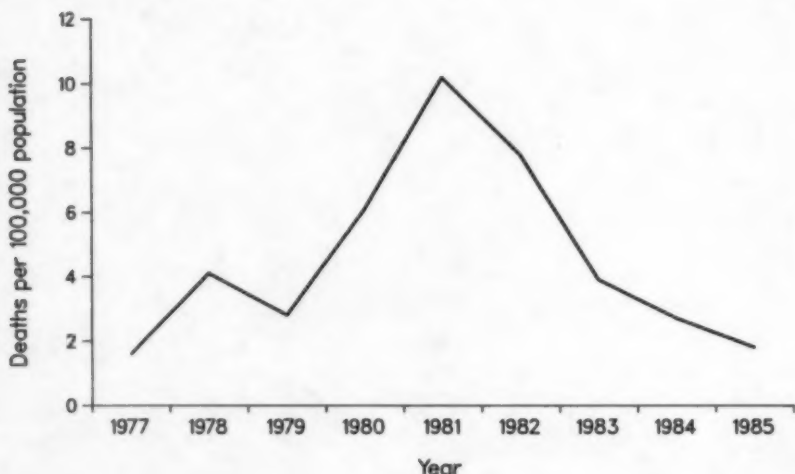


FIGURE 9. Crude rates for sudden unexplained deaths among male Southeast Asian refugees in the United States, by year, 1977-1985



Seasonality. Deaths were fairly evenly distributed by month of occurrence.

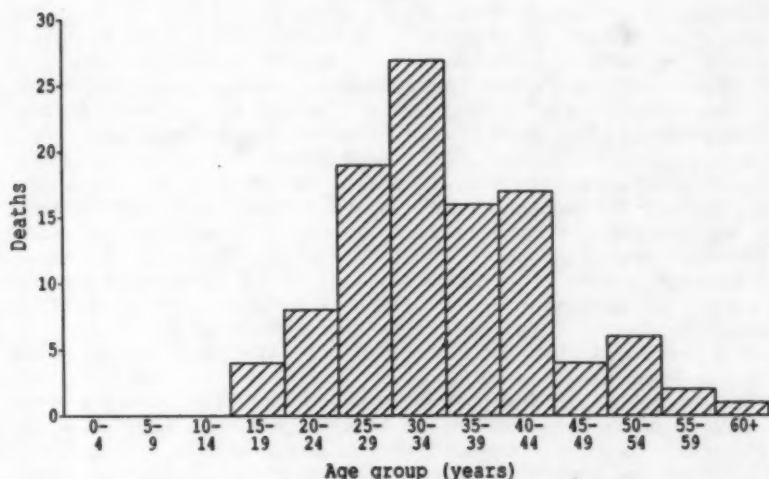
Time of Death. The time of death was known in 84 of the 104 cases. Eighty-two (98%) of the 84 deaths occurred between 10 p.m. and 8 a.m.

Sex. All of the deceased were male except for one, a 38-year-old Laotian Hmong who had been in the United States for 13 months when she died in March 1981 in Portland, Oregon.

Age Distribution. The age at death ranged from 16 to 63 years, with a median of 32 years (Figure 10). Seventy-five percent of the deceased were between the ages of 25 and 45.

Country of Origin. The country of origin is known for all 104 of the deceased. Seventy-one (68%) were from Laos, 19 (18%) from Cambodia, and 14 (13%) from Vietnam. The ethnicity is known for 70 of the Laotians: 40 (57%) were Hmong, 26 (37%) were lowland Lao, three (4%) were Mien, and one (1%) was Theung.

Residence at Time of Death. The geographic distribution of cases generally followed the distribution of the refugee population in the United States (Table 1), with some notable exceptions. California, with 39.8% of the refugee population as of September 30, 1985 (6), reported 32 (31%) of the 104 deaths. In contrast, Minnesota — with 3.2% of the refugee population — reported 15 (14%) of the deaths, and New York — with 3.8% of the population — reported only one (1%) of the deaths.

FIGURE 10. Distribution of sudden unexplained death syndrome among Southeast Asian refugees, by age group, January 1975 - September 1986**TABLE 1. Distribution of sudden unexplained death syndrome and the Southeast Asian (SEA) refugee population, by state, United States, September 30, 1986**

State	Cases	(%)	SEA refugee population as of 9/30/85	Percent of total U.S. SEA refugee population*
California	32	(30.8)	303,100	39.8
Colorado	1	(1.0)	10,500	1.4
Dist. of Columbia	1	(1.0)	1,600	.2
Georgia	1	(1.0)	9,700	1.3
Illinois	5	(4.8)	25,300	3.3
Iowa	2	(1.9)	8,600	1.2
Maine	1	(1.0)	1,700	.2
Maryland	1	(1.0)	9,300	1.2
Massachusetts	2	(1.9)	22,500	3.0
Michigan	3	(2.9)	10,400	1.4
Minnesota	15	(14.4)	24,100	3.2
New Hampshire	1	(1.0)	800	.1
New York	1	(1.0)	28,600	3.8
Ohio	3	(2.9)	10,300	1.4
Oklahoma	3	(2.9)	8,600	1.1
Oregon	8	(7.7)	17,400	2.3
Rhode Island	3	(2.9)	5,800	.8
Texas	7	(6.7)	57,200	7.5
Utah	1	(1.0)	7,900	1.0
Virginia	1	(1.0)	20,700	2.7
Washington	11	(10.6)	34,300	4.5
Wisconsin	1	(1.0)	10,000	1.3
TOTAL	104	(100)	628,600	82.6

*Percent based on total U.S. SEA refugee population, which was 760,900 as of September 30, 1985.

Discussion

Since the number of SUDS cases in the United States peaked in 1981, the number of reported cases has dropped markedly. During this same period, the number of SEA refugees in the United States has continued to rise, and this, coupled with the decrease in cases, has caused a precipitous decline in the death rate from SUDS. Although the number of cases has declined, the distribution of cases by age (median = 32 years), sex (99% male), and time of death (98% between 10 p.m. and 8 a.m.) has remained relatively unchanged since the first reports that CDC received in 1981 (1,2). Generally, the geographic distribution of cases continues to reflect the population distribution of SEA refugees in the United States.

In previous studies of unexplained deaths in Southeast Asia, Japan, and Hawaii, similar distributions of cases by age, sex, and time of death have been shown (9-12). In one study of SUDS cases in the Philippines and in a refugee camp in Thailand, a seasonal variation in deaths was found, with a peak between January and March (9); this seasonality is not evident in CDC's case series.

The decline in the number of SUDS cases may be explained by a decreased incidence of SUDS or by a poor ascertainment of cases. From February 1981 through April 1983, CDC actively solicited cases from state and local health departments, coroners, and medical examiners. From May 1983 until February 1986, CDC surveillance for SUDS was limited, and this might be the principal explanation for the decline (13). Since February 1986, a vigorous effort has been made to locate cases that have occurred from January 1983 to the present, but the number of additional cases identified has not been significant enough to support this explanation. Consequently, the incidence appears to have truly decreased.

To assess the adequacy of the SUDS reporting system, CDC is analyzing vital statistics data, reviewing records of emergency rooms and emergency medical services, and conducting a telephone survey of a sample of medical examiners and coroners nationwide.

Resuscitation is one possible explanation for the decline in deaths. To investigate this possibility, CDC is reviewing records of emergency rescue systems in four cities that have large SEA populations (Seattle, Washington; San Diego, California; Fresno, California; and Minneapolis-St. Paul, Minnesota).

Sudden unexpected deaths are rare, and ascertainment of SUDS cases is probably incomplete. Nevertheless, since the decrease in reported SUDS cases has persisted despite active solicitation of case reports and quality-assurance measures, one must conclude that the decline is real. This decline may offer some insight into the cause of SUDS.

Hypotheses about the cause of SUDS have included the stress of displacement, immigration, and resettlement (1,2,14); the disruption of religious beliefs and traditional health practices (14); an abnormality of sleep (15); a congenital abnormality in the conduction system of the heart (16); a dietary deficiency; and toxic substances in foods, medicines, or folk remedies. CDC's surveillance system reflects information on the number of SUDS cases and the results of postmortem examinations but not on specific causative factors (except for those addressed in the postmortem examination). Thus, the hypotheses on stress, dietary deficiency, or toxic substances in foods (other than alcohol or drugs detectable in routine drug-screening tests—for example, for aspirin, barbiturates, and opiates) cannot be tested directly on the basis of surveillance data. In one study, the hearts of 18 persons who had died of SUDS were examined closely, and abnormalities were found in the conduction system of most of them (16). However, control hearts from Southeast Asians were not examined, and the functional significance of these findings has not been established.

The decline in both the number of cases and the crude incidence suggests that some risk factor present soon after the refugees arrive in the United States may be important and that this risk factor diminishes with time. This temporal pattern is consistent with the hypotheses concerning stress, dietary deficiency, and toxic substances in foods, medicines, and folk remedies. Although this pattern is less compatible with a congenital cardiac abnormality or a sleep disturbance, hypotheses concerning these two risk factors may still be viable if most susceptibles have died or if some environmental factor (such as stress) in combination with the cardiac abnormality or sleep disturbance is causative. Although several hypotheses have been considered, the cause of SUDS has not been fully determined, and further study is required.

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